

**SERVICE  
MANUAL**

**1122DC**

**marantz**

**model 1122 DC**

*Stereo Console Amplifier*

## TABLE OF CONTENTS

SECTION	PAGE
1. POWER AMPLIFIER ADJUSTMENT .....	1
2. TEST EQUIPMENT REQUIRED FOR SERVICING .....	1
3. VOLTAGE CONVERSION FOR EUROPE .....	3
4. MAJOR COMPONENT LOCATIONS .....	4
4.1 Front Panel Adjustment and Component Locations .....	4
4.2 Main Chassis Component Locations (Top View) .....	4
4.3 Rear Panel Adjustment and Component Locations .....	5
5. DIAGRAM AND COMPONENT LOCATIONS .....	6
5.1 Power Transformer Assembly (PN00) Schematic Diagram and Component Locations .....	6
5.2 Input Terminal Assembly (PJ00) Schematic Diagram and Component Locations .....	7
5.3 Mic Assembly (PV00) Schematic Diagram and Component Locations .....	9
5.4 Phono Amp. & Selector SW. Assembly (P400) Schematic Diagram and Component Locations .....	9
5.5 Power Supply Assembly (P850) Schematic Diagram and Component Locations .....	12
5.6 Speaker SW. Assembly (PS00) Schematic Diagram and Component Locations .....	13
5.7 Tone Amp. Assembly (PE00) Schematic Diagram and Component Locations .....	14
5.8 Main Amp. Assembly (P700) Schematic Diagram and Component Locations .....	17
6. BLOCK DIAGRAM .....	21
7. CONNECTION DIAGRAM .....	23
8. SCHEMATIC DIAGRAM .....	25
9. EXPLODED MECHANICAL DIAGRAM .....	27
9.1 Cabinet .....	27
9.2 Chassis .....	29
9.3 Rear Panel for U.S.A. & Canadian Models .....	31
9.4 Rear Panel for European Model .....	31
10. PACKING MATERIAL EXPLODED VIEW .....	32
11. PARTS LIST .....	33
12. TECHNICAL SPECIFICATIONS .....	40

## 1. POWER AMPLIFIER ADJUSTMENT

### 1.1 DC-OFFSET Adjustment

Connect VTVM to J860 and J865 (or ground) and adjust left channel R739 until the meter indication reaches 0mV ( $\pm 5\text{mV}$ ). Similarly, connect VTVM to J861 and J865 (or ground) and adjust right channel R740 until the meter indication reaches 0mV ( $\pm 5\text{mV}$ ).

## 2. TEST EQUIPMENT REQUIRED FOR SERVICING

Table 1 lists the test equipment required for servicing the Model 1122DC Stereo Console Amplifier. The wattmeter, AC voltmeter, and variable autotransformer may be assembled as a test fixture as shown schematically in Figure 1. The load resistors and AC ammeter may be assembled into a second test fixture as shown in Figure 2.

Item	Manufacturer and Model No. (or equivalent)	Use
Distortion Analyzer and Audio Oscillator	Sound Technologie, Model 1700B (NOTE: Less than 0.002 percent residual distortion is required.)	Measures distortion, voltage of amplifier output and sinewave source.
Oscilloscope	Tektronix, Model 503; Data, Model 555	Waveform analysis and troubleshooting.
VTVM	RCA Senior Volt-Ohmyst, Model WV-98C	Voltage and resistance measurements.
AC Wattmeter	Simpson, Model 390	Monitors primary power consumption of amplifier.
AC Ammeter (0 to 10 amps)	Commercial Grade	Monitors amplifier output under short circuit condition.
Line Voltmeter (0 to 150V AC)	Commercial Grade	Monitors potential of primary power to amplifier.
Variable Autotransformer (0 to 140V AC, 10 amps)	Powerstat, Model 116B	Adjusts level of primary power to amplifier.
Shorting Plug	Use phono plug with 600 ohms across center pin and shell.	Shorts amplifier input to eliminate noise pickup.
Power Supply Bleeder Resistor (10 ohms at 1W)	Commercial Grade	Discharges power supply filter capacitors prior to disassembly or resistance measurements.
Output Load Resistor ( $8\Omega \pm 0.5\%$ , 250W)	Commercial Grade	Provides 4-ohm load for amplifier output termination.
Output Load Resistor ( $4\Omega \pm 0.5\%$ , 250W)	Commercial Grade	Provides 8-ohm load for amplifier output termination.
Output Load Capacitor (0.5 mfd)	Mylar	Provides capacitive load for instability checks.
AC Power Control Box	Optional Item. Fabricate in accordance with Figure 1.	Monitors and controls primary power for amplifier.
Amplifier Output Load Box	Optional Item. Fabricate in accordance with Figure 2.	Provides various amplifier loads and can monitor shorted output.

Table 1 Test Equipment Required for Servicing

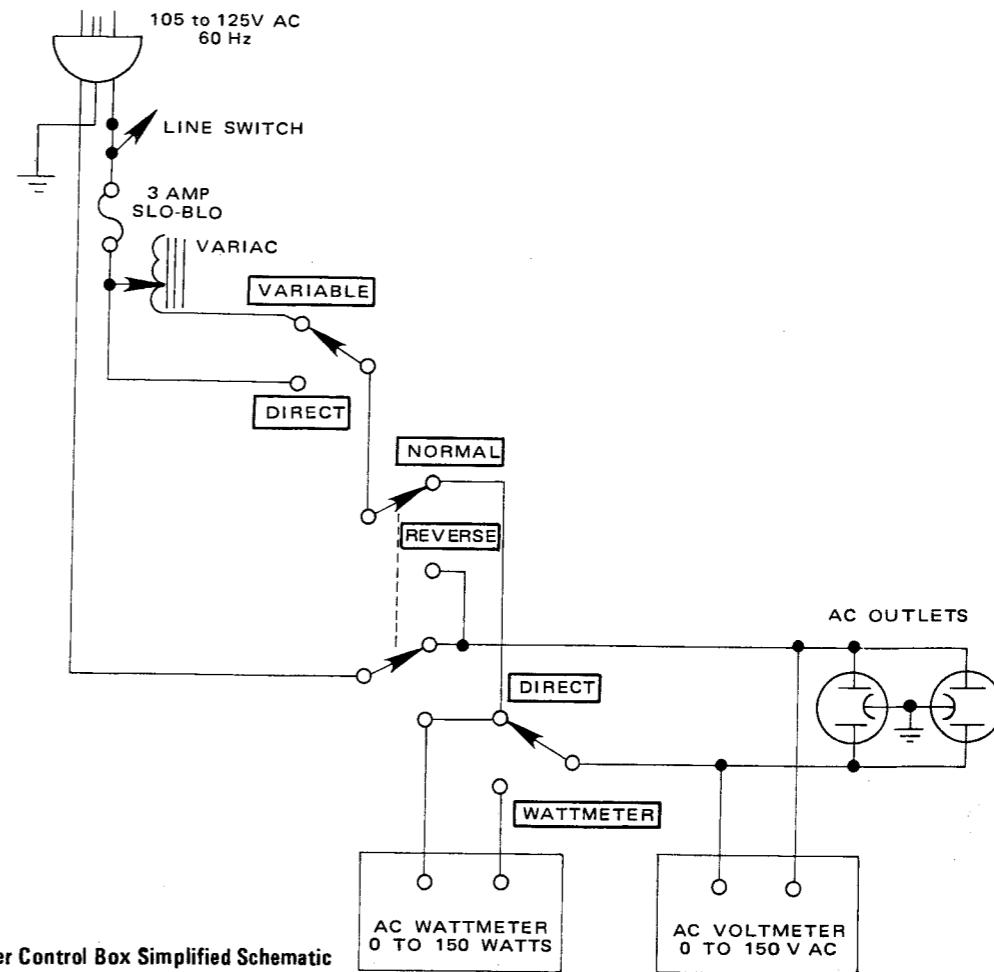


Figure 1. AC Power Control Box Simplified Schematic

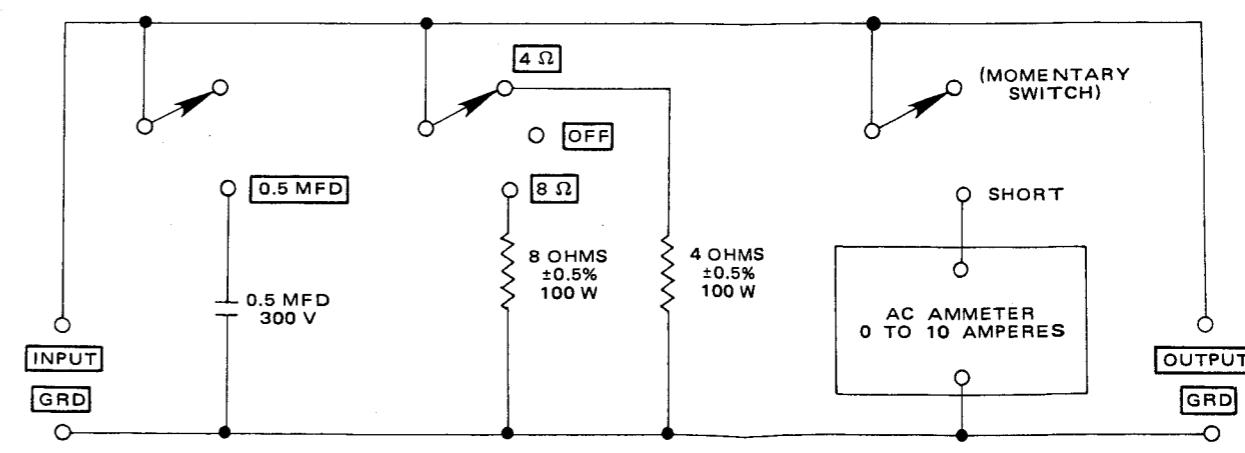
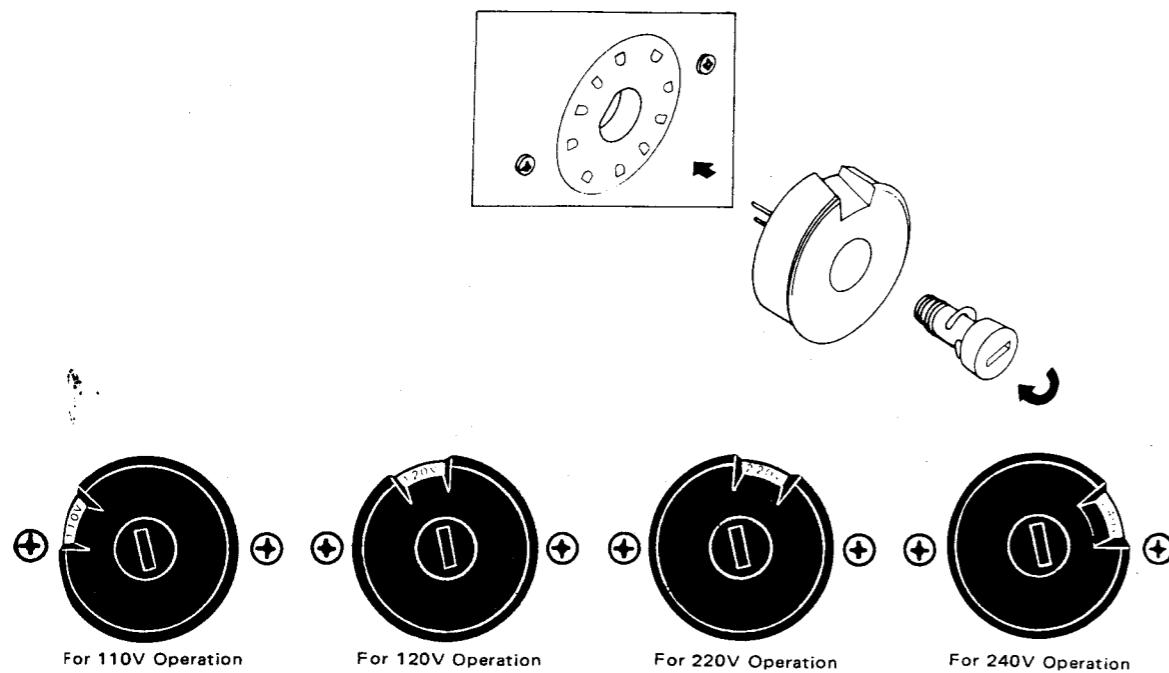
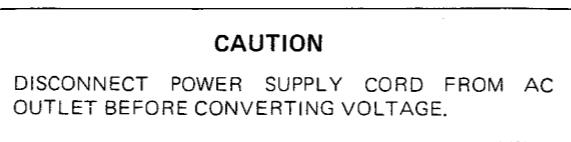
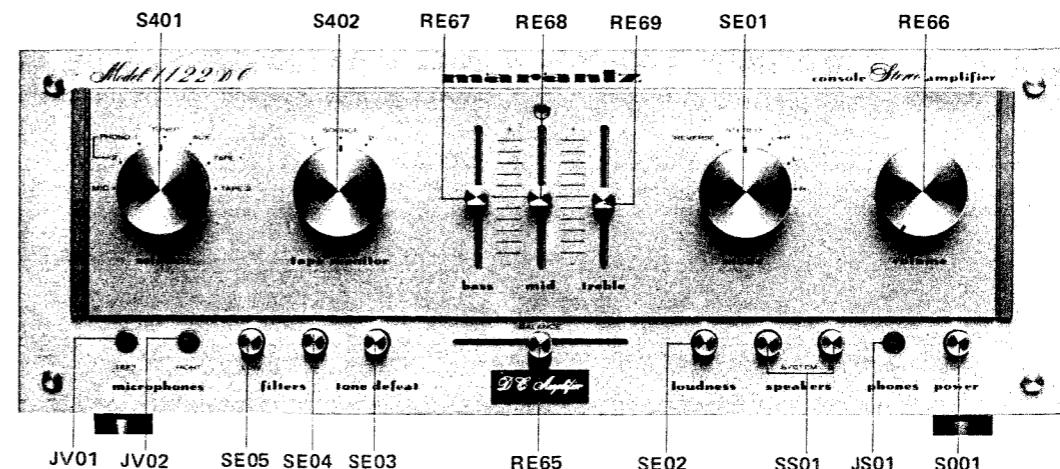
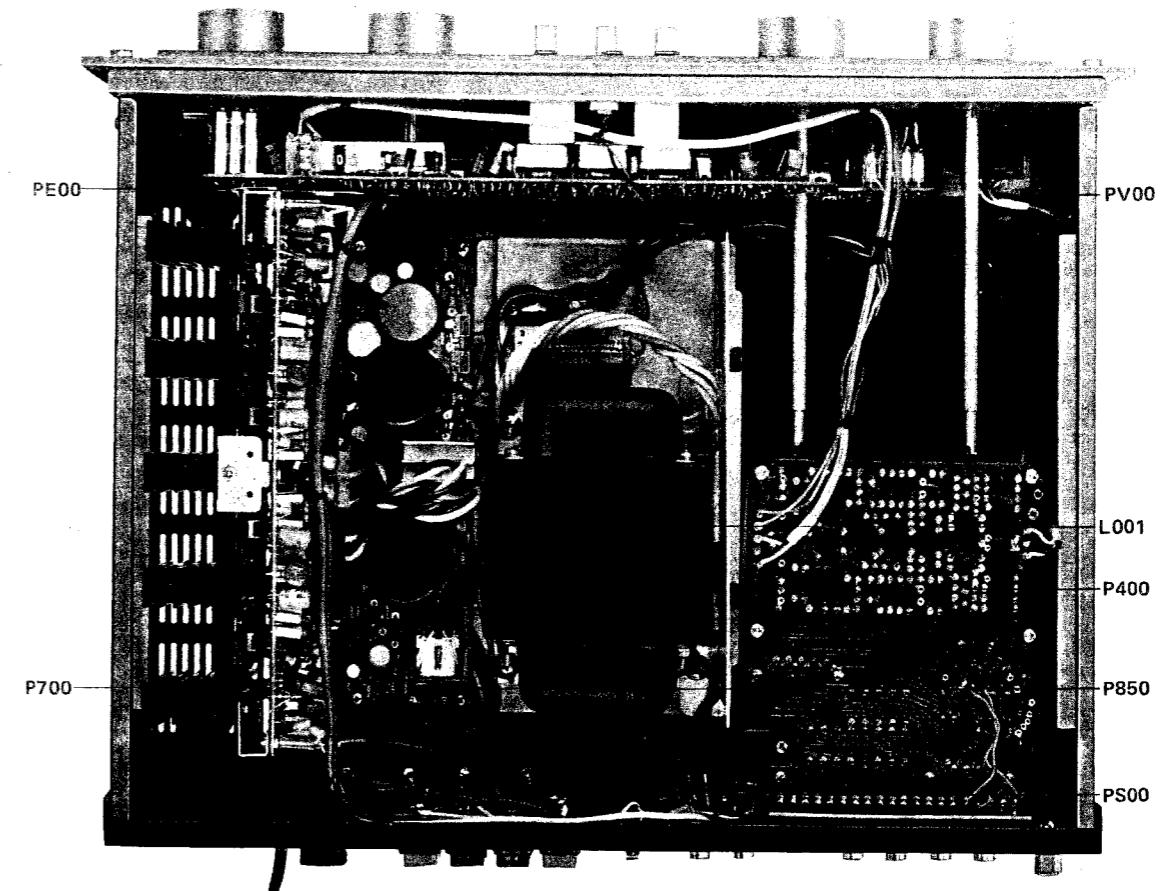


Figure 2. Amplifier Output Load Box Simplified Schematic

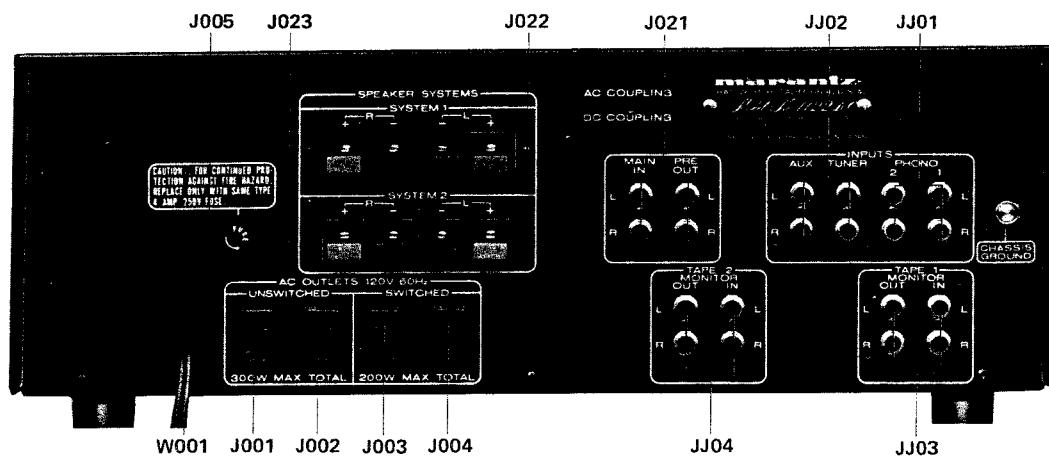
**3. VOLTAGE CONVERSION****• EUROPEAN MODEL ONLY**

This Model is equipped with a universal power transformer to permit operation at 110, 120, 220 and 240V AC 50/60 Hz.

To convert the unit to the required voltage, set the plug as illustrated so that you can adjust the voltage as required.

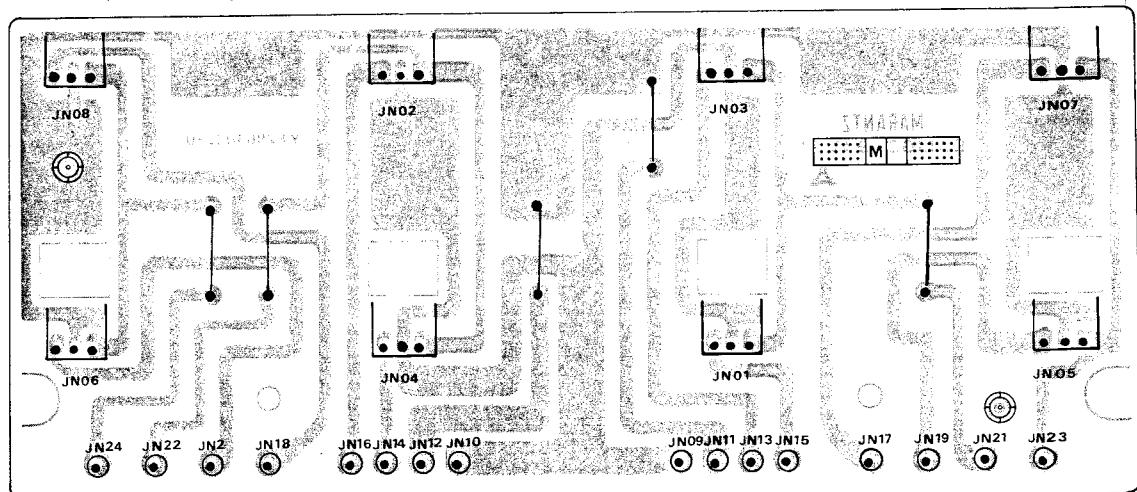
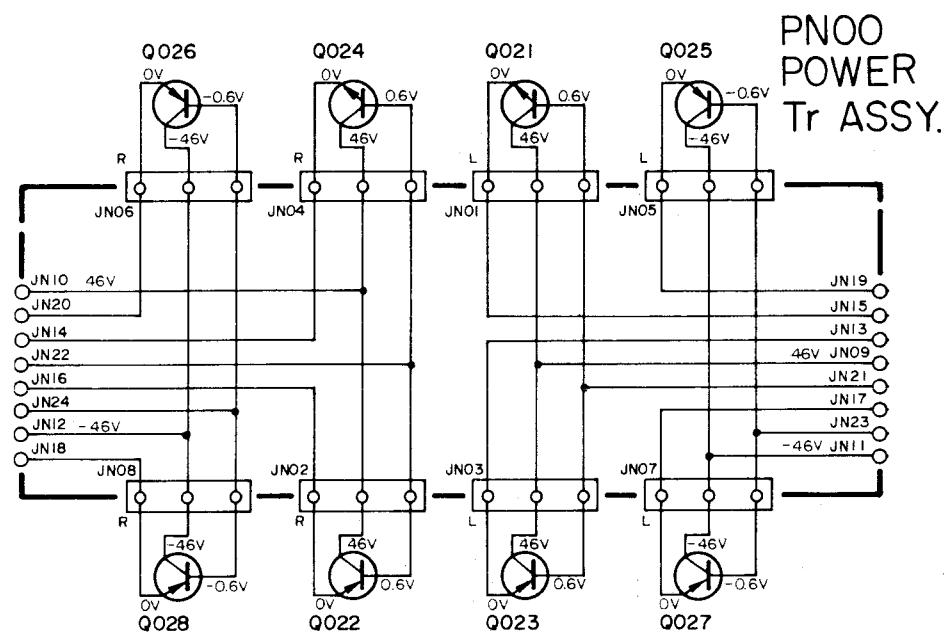
**4.1 Front Panel Adjustment and Component Locations****4.2 Main Chassis Component Locations (Top View)**

#### 4.3 Rear Panel Adjustment and Component Locations

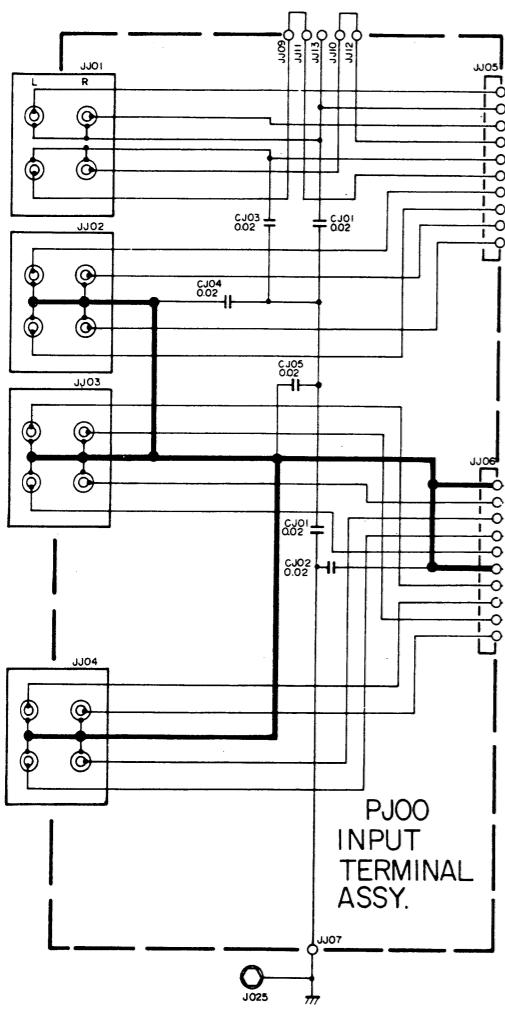


## 5. DIAGRAM AND COMPONENT LOCATIONS

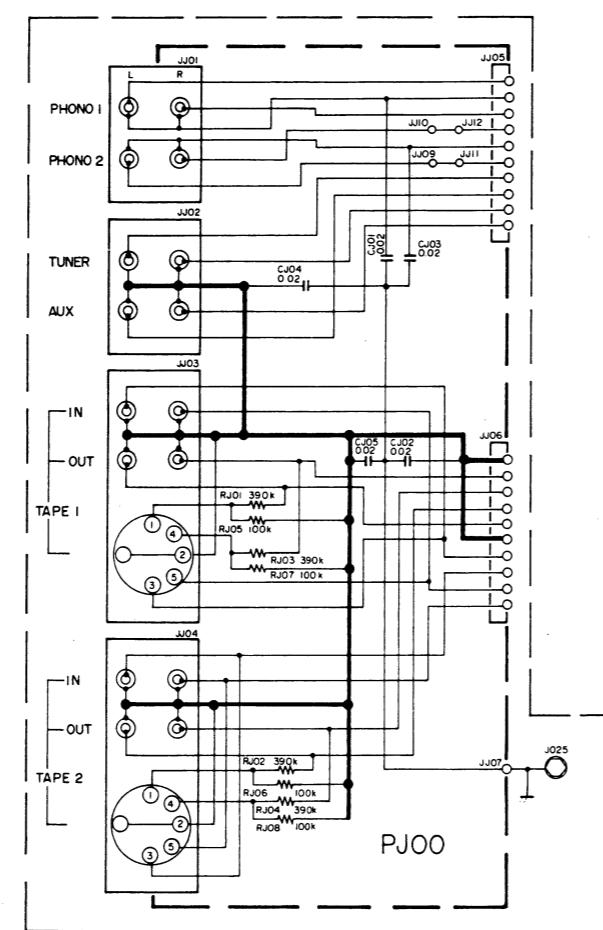
### 5.1 Power Transformer Assembly (PN00) Schematic Diagram and Component Locations



5.2 Input Terminal Assembly (PJ00) Schematic Diagram

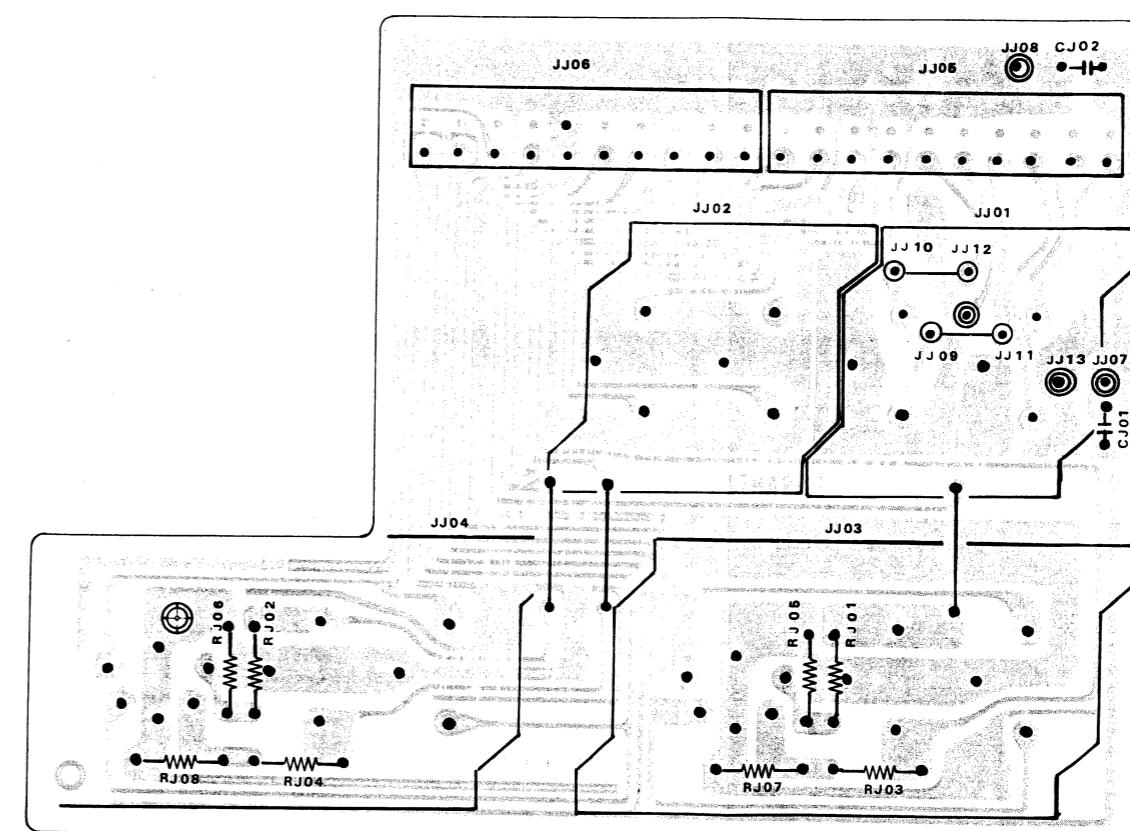


For U.S.A., Canada

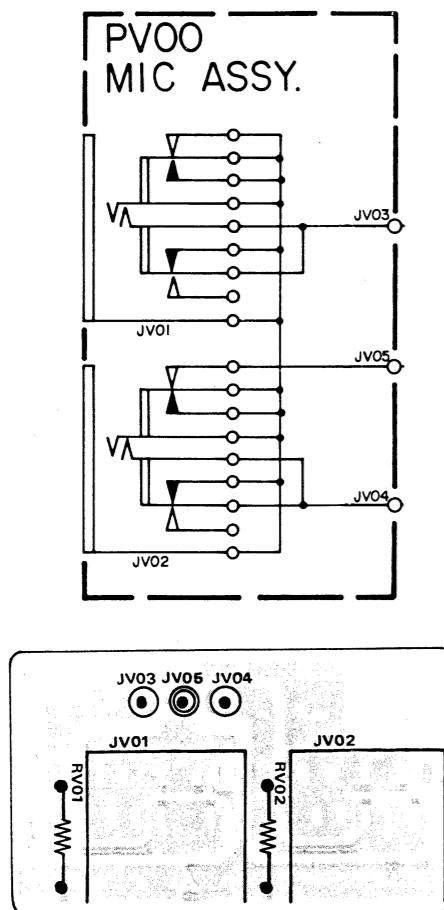


For Europe

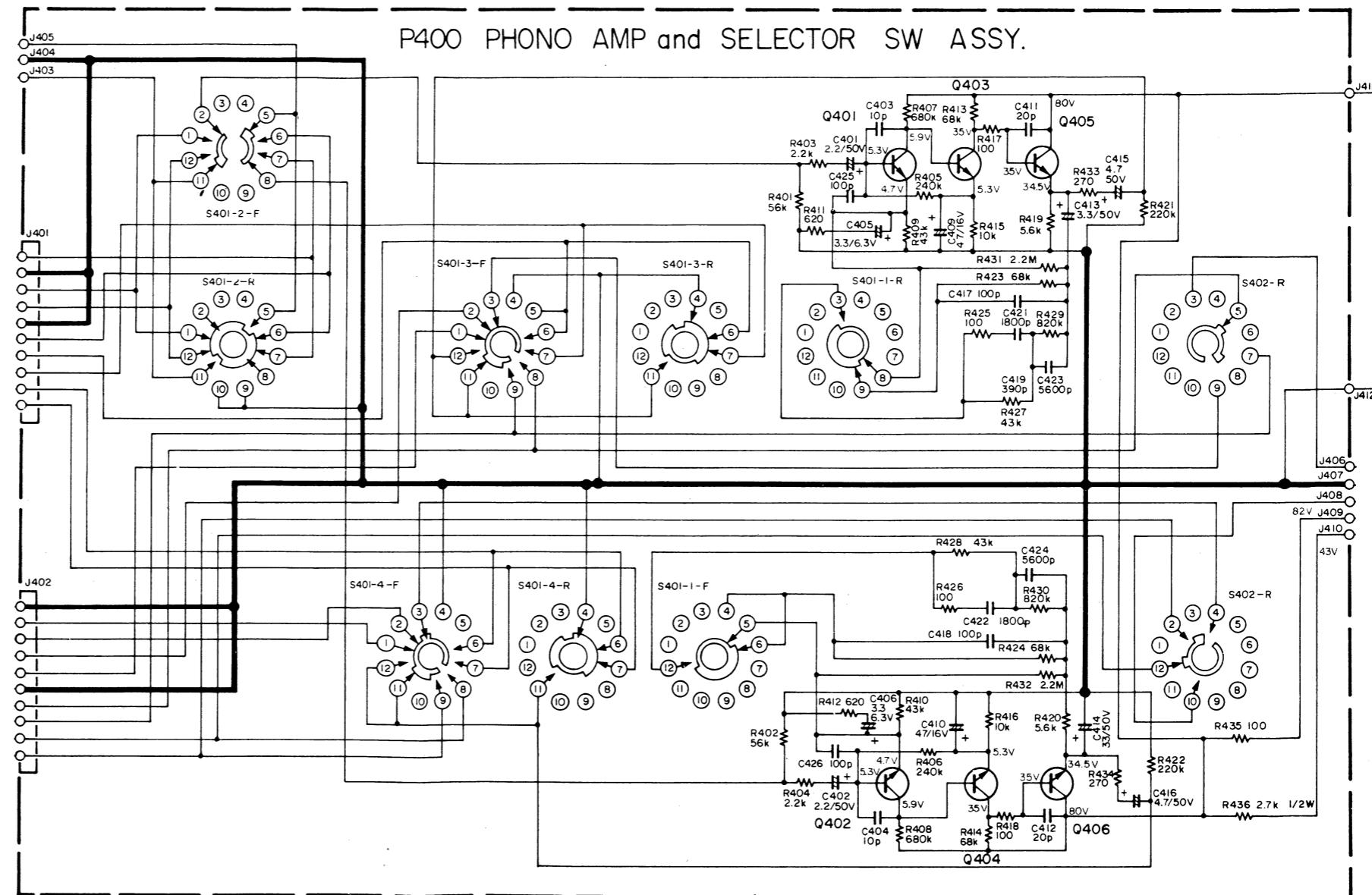
• Input Terminal Assembly (PJ00) Component Locations



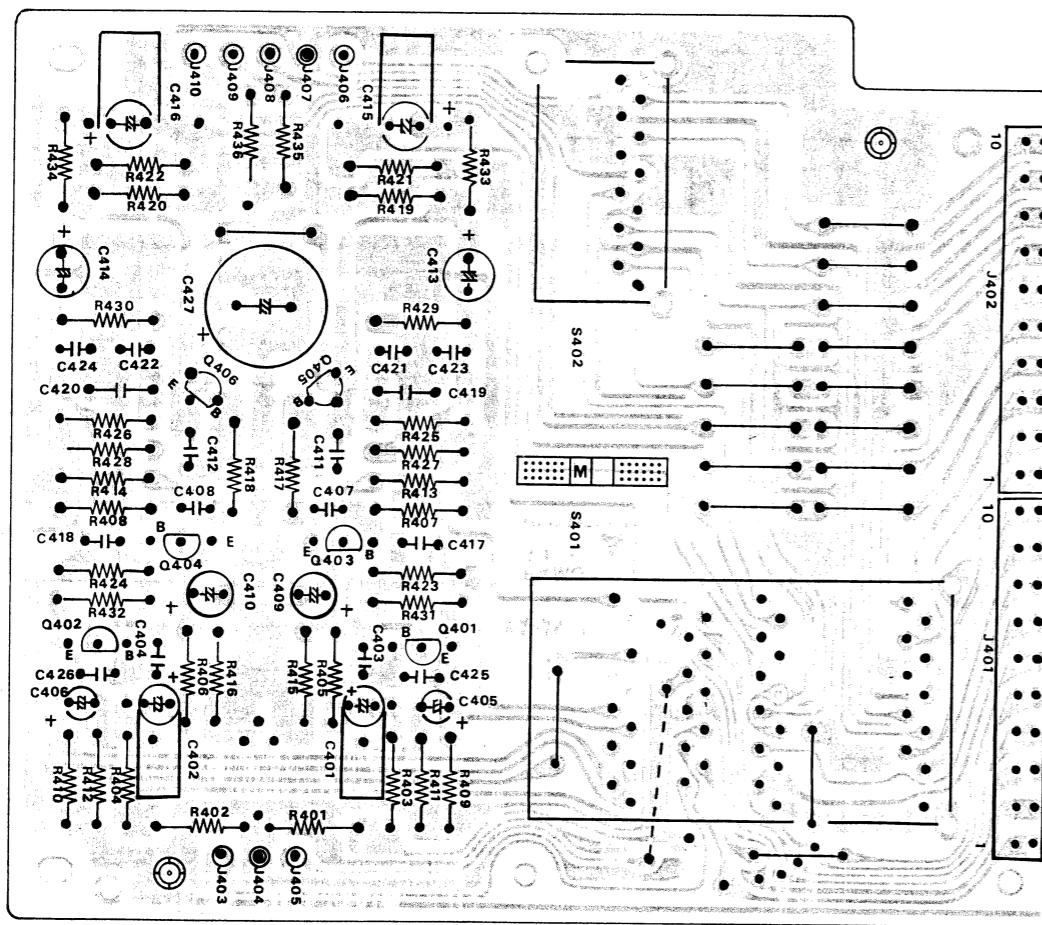
## 5.3 Mic Assembly (PV00) Schematic Diagram and Component Locations



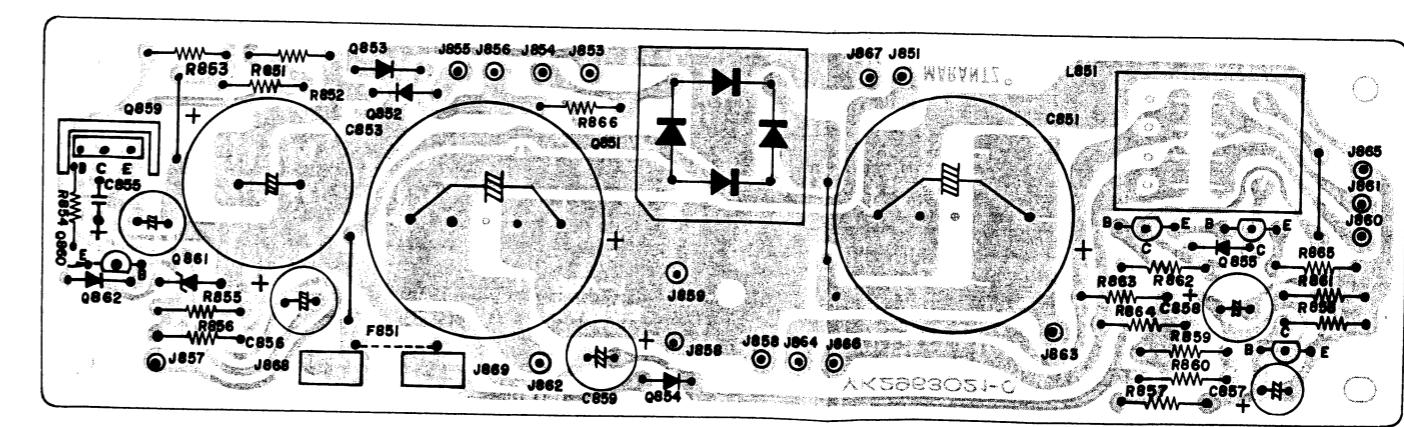
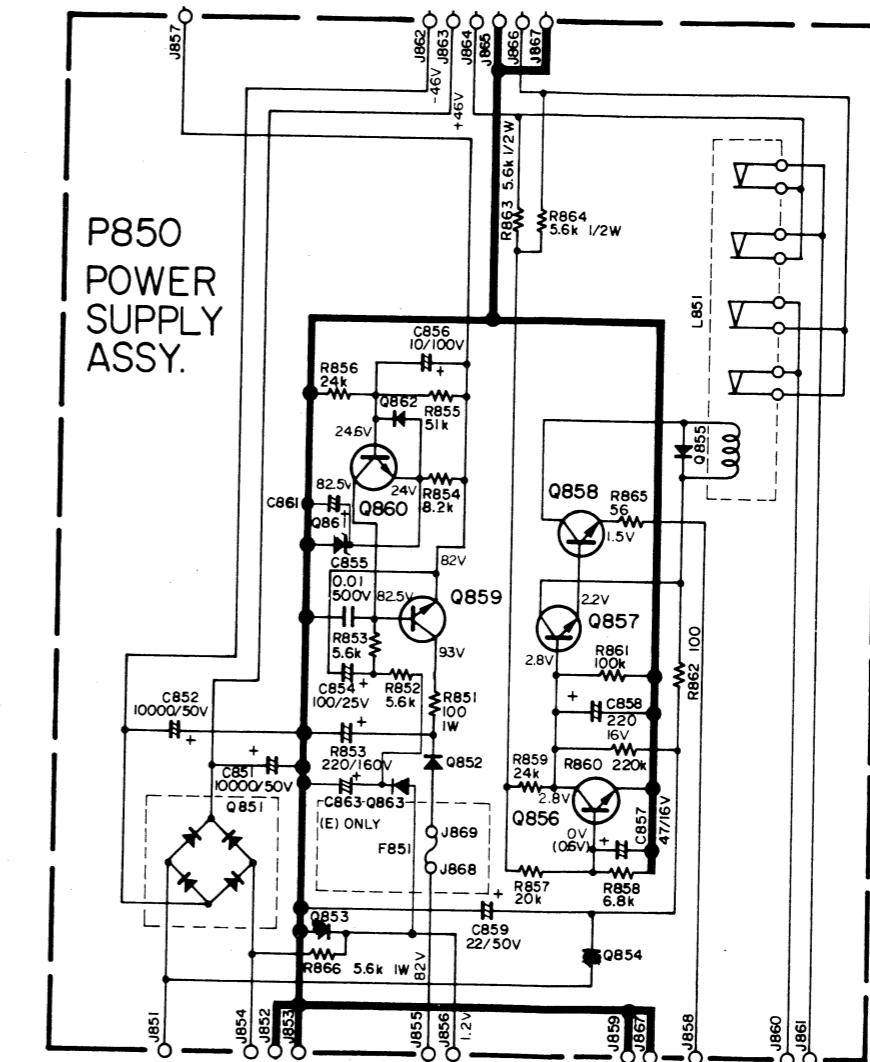
## 5.4 Phono Amp. &amp; Selector SW. Assembly (P400) Schematic Diagram



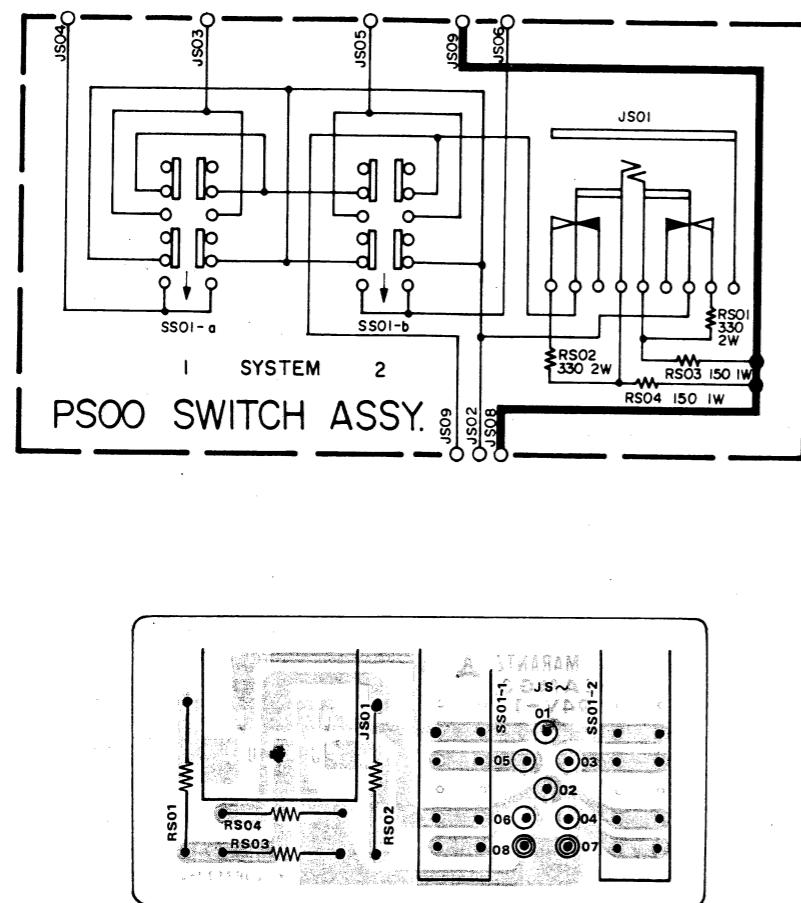
## • Phono Amp. & Selector SW. Assembly (P400) Component Locations



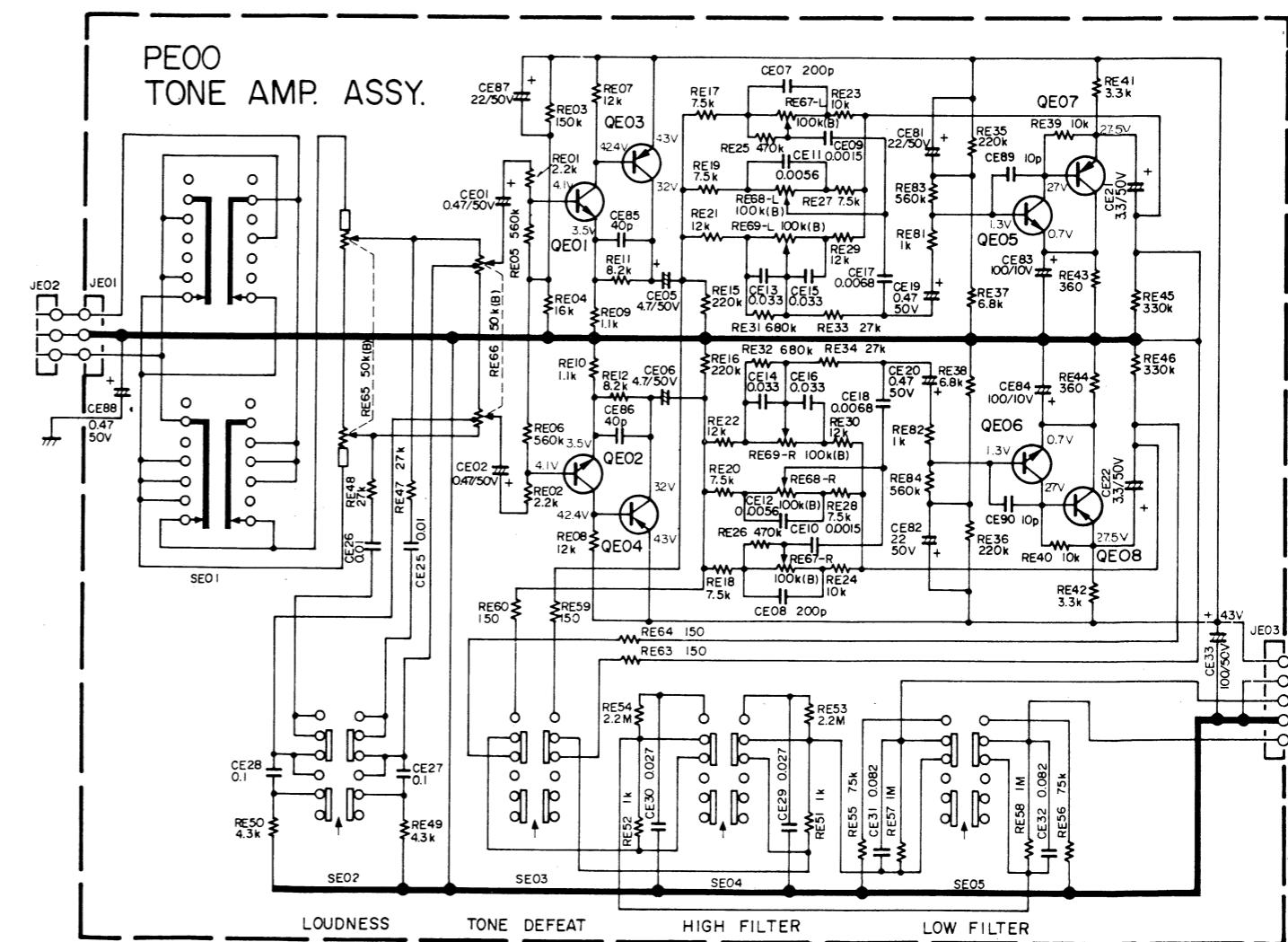
## 5.5 Power Supply Assembly (P850) Schematic Diagram and Component Locations



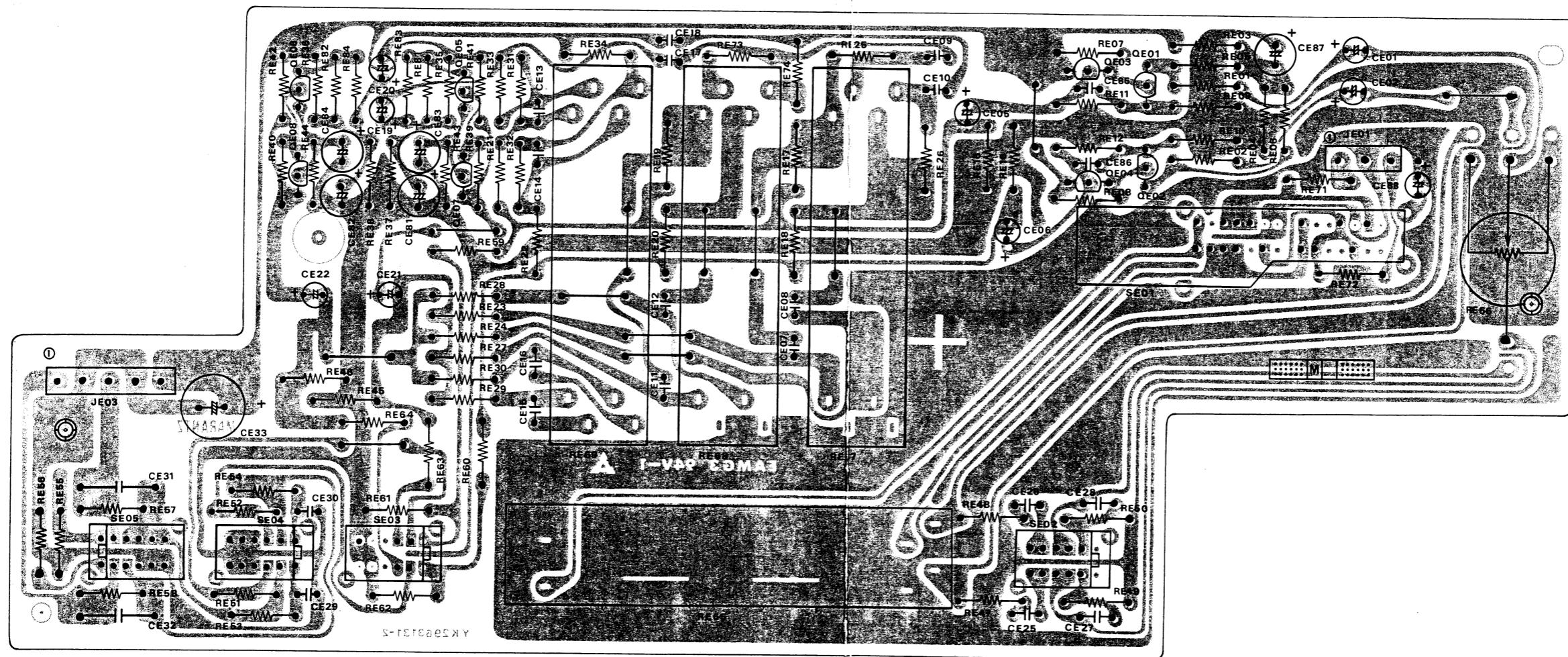
5.6 Speaker SW. Assembly (PS00) Schematic Diagram and Component Locations



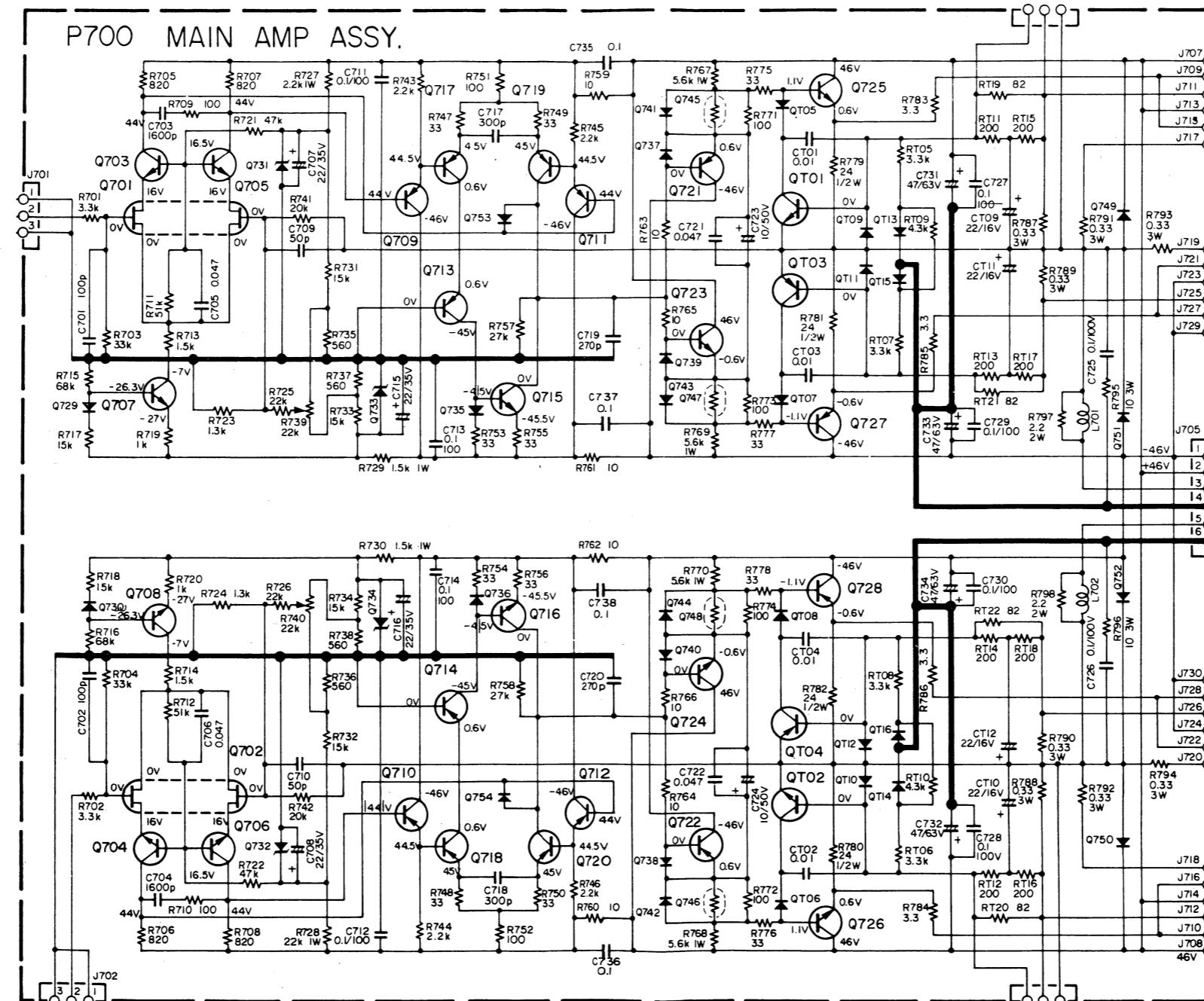
5.7 Tone Amp. Assembly (PE00) Schematic Diagram



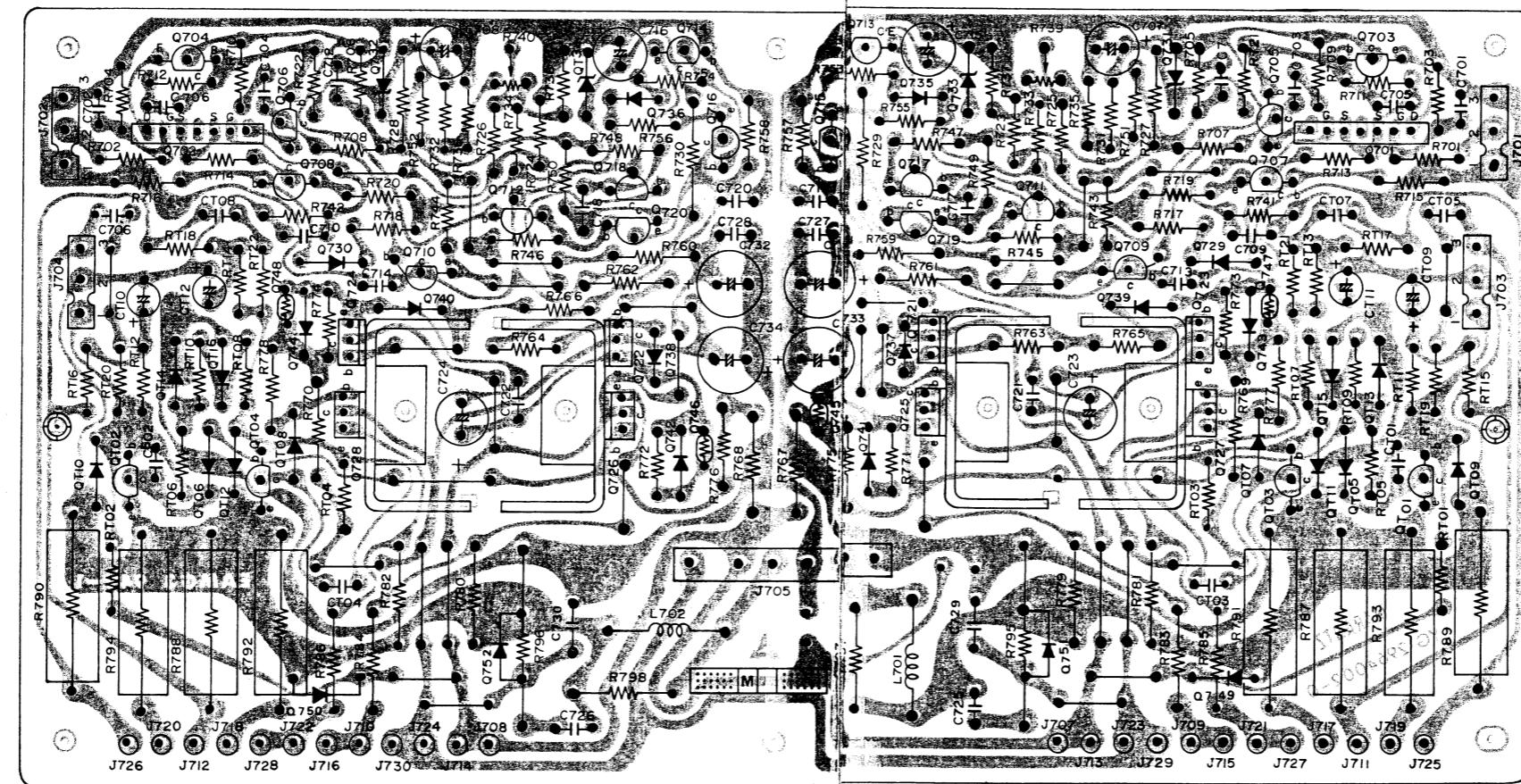
- **Tone Amp. Assembly (PE00) Component Locations**



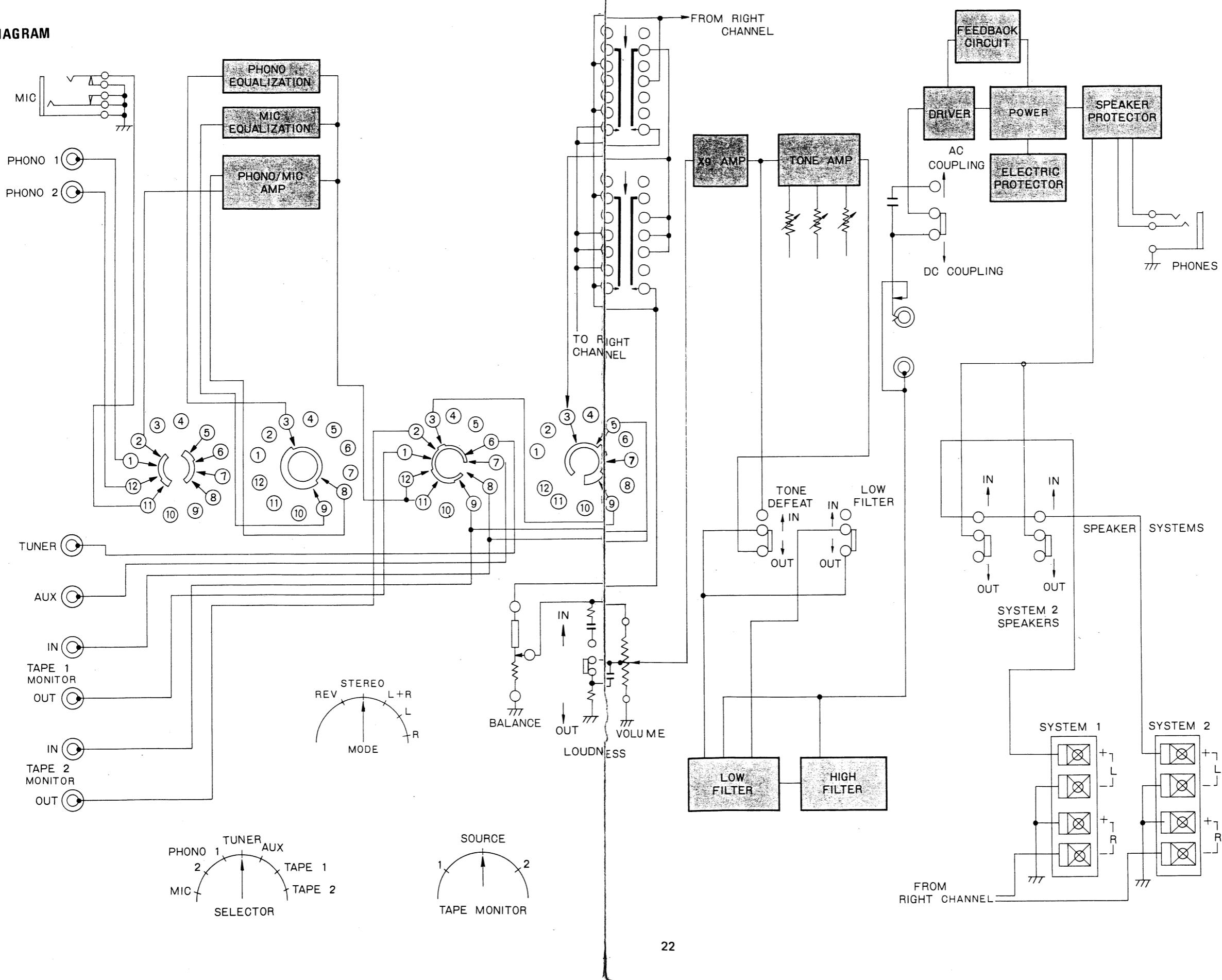
## 5.8 Main Amp. Assembly (P700) Schematic Diagram



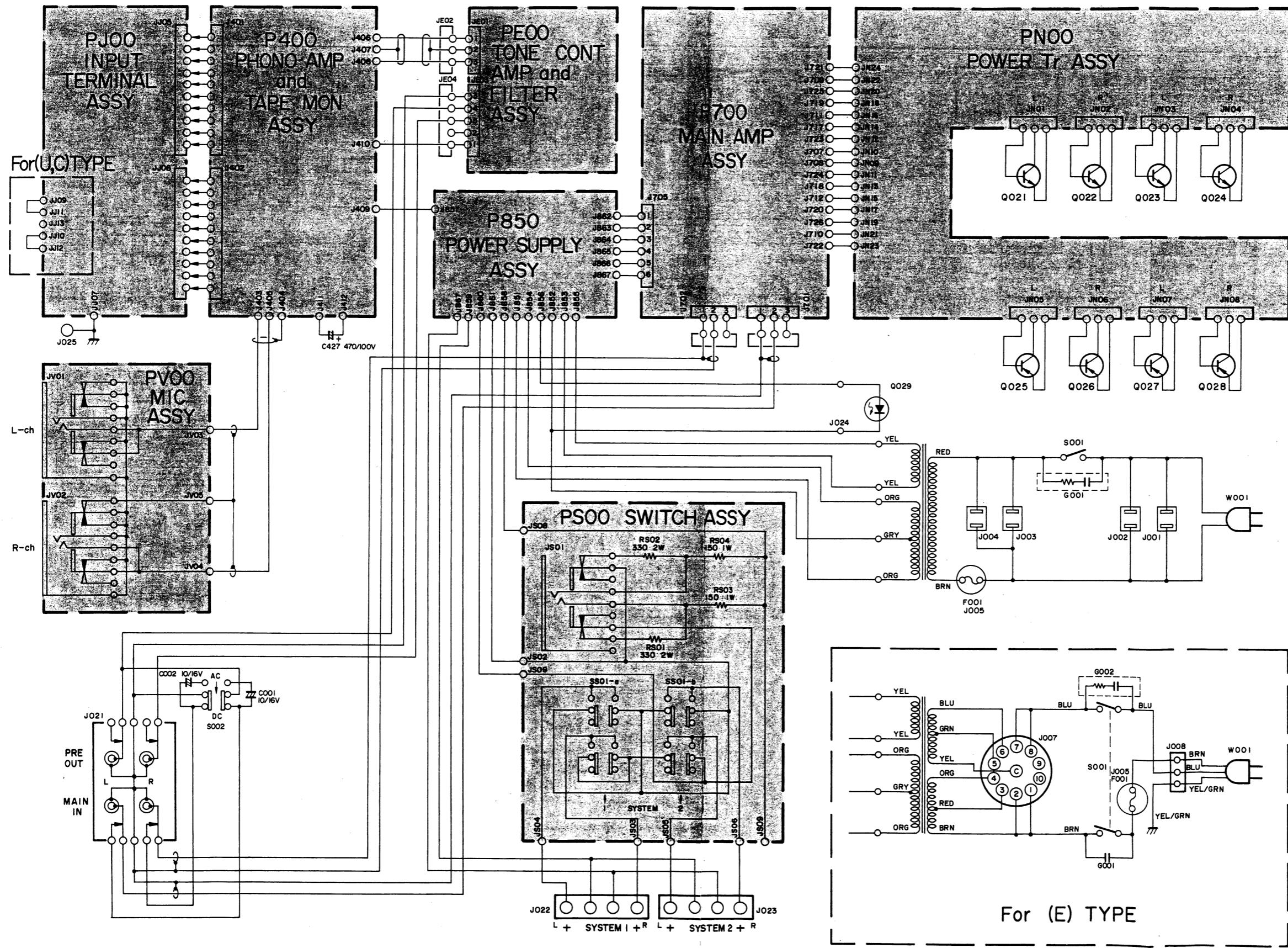
• Main Amp. Assembly (P700) Component Locations



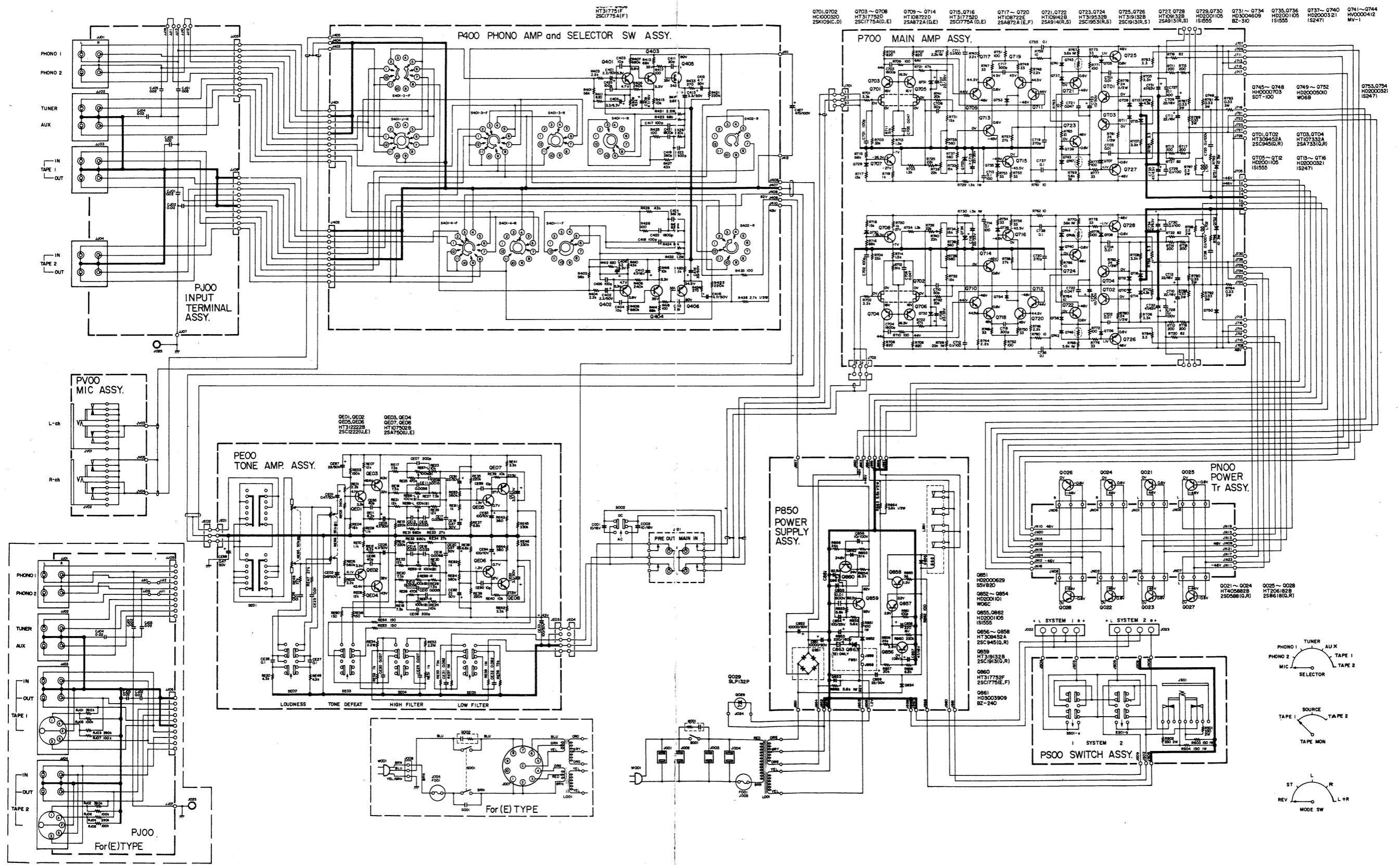
## 6. BLOCK DIAGRAM



7. CONNECTION DIAGRAM

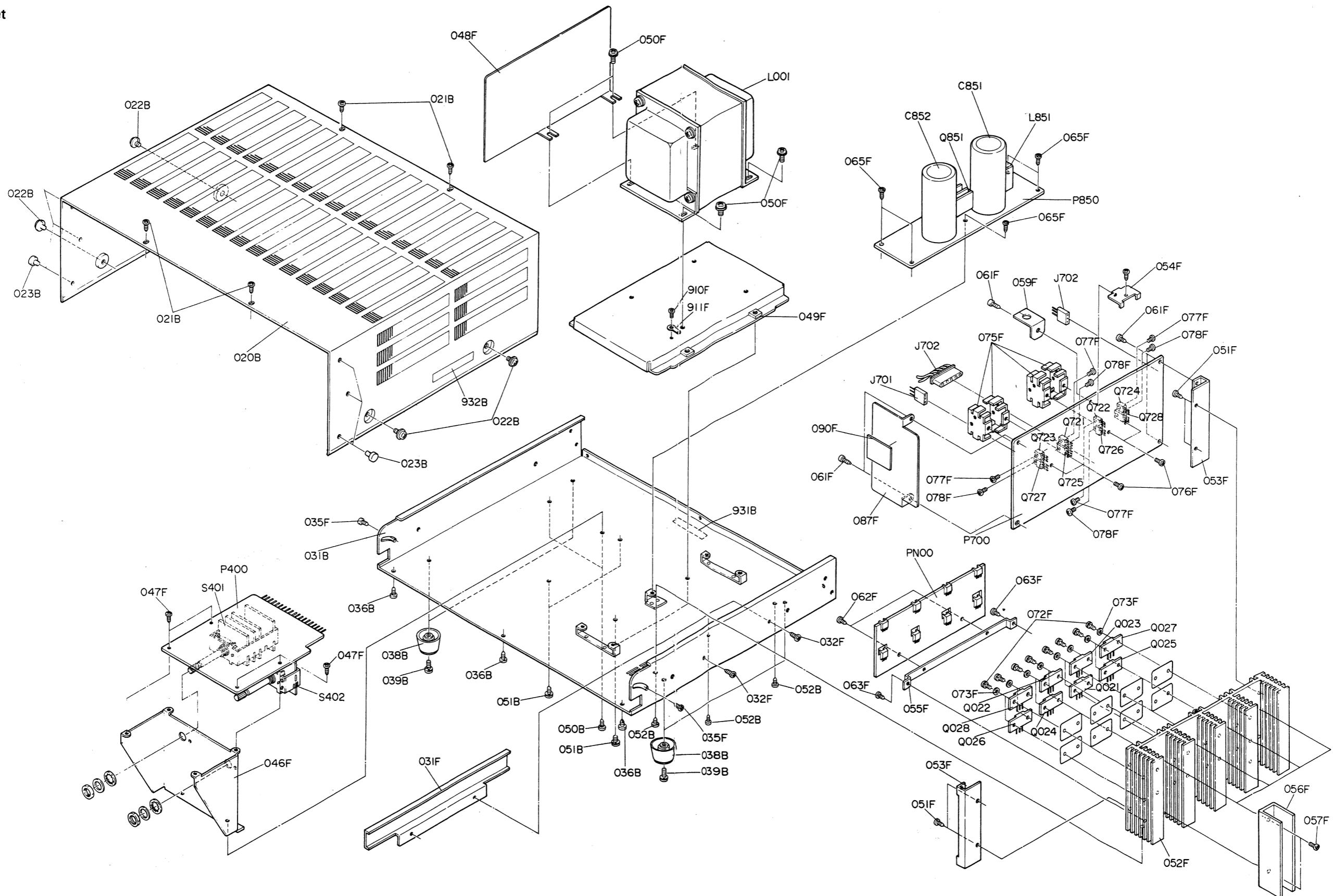


**8. SCHEMATIC DIAGRAM**

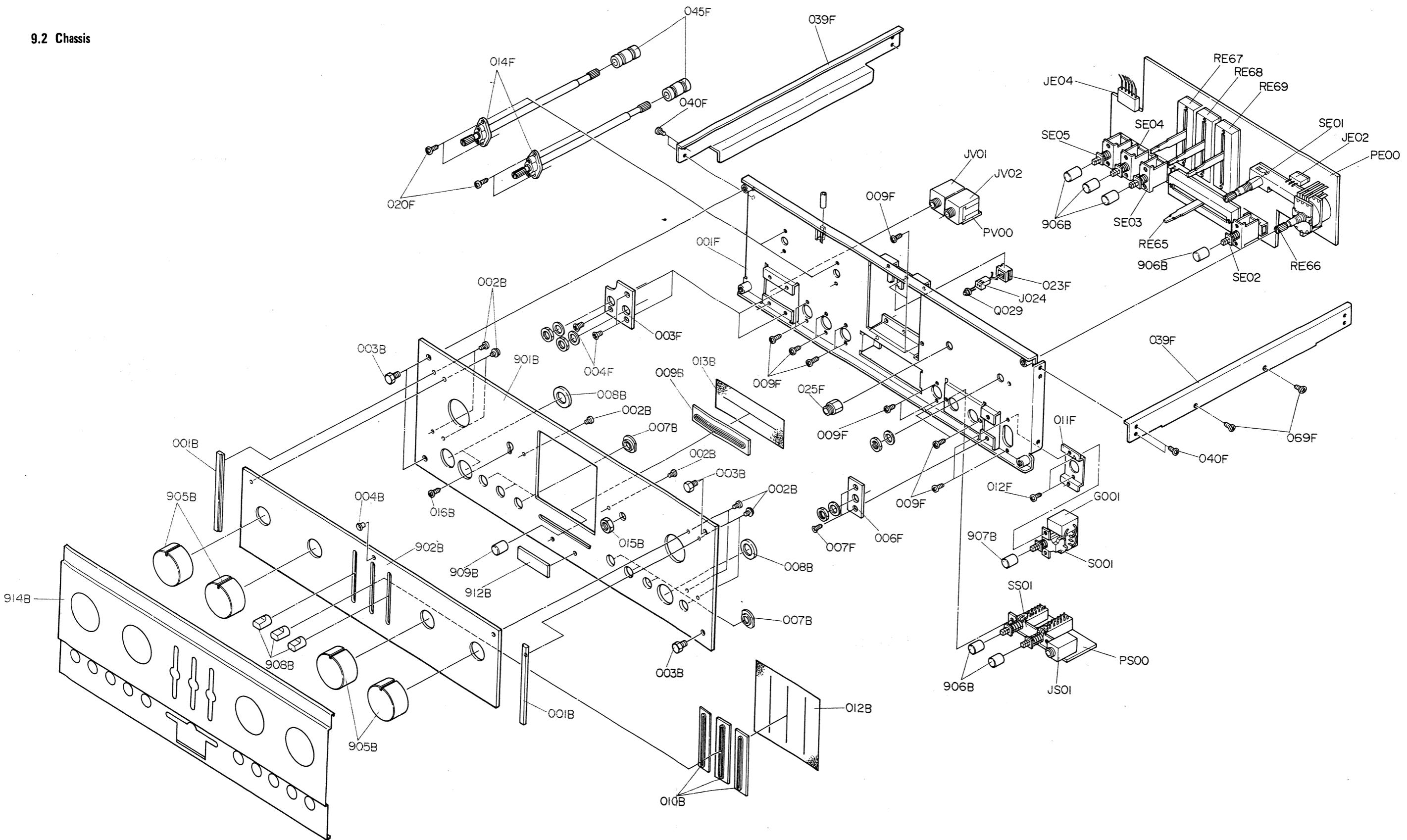


## 9. EXPLODED MECHANICAL DIAGRAM

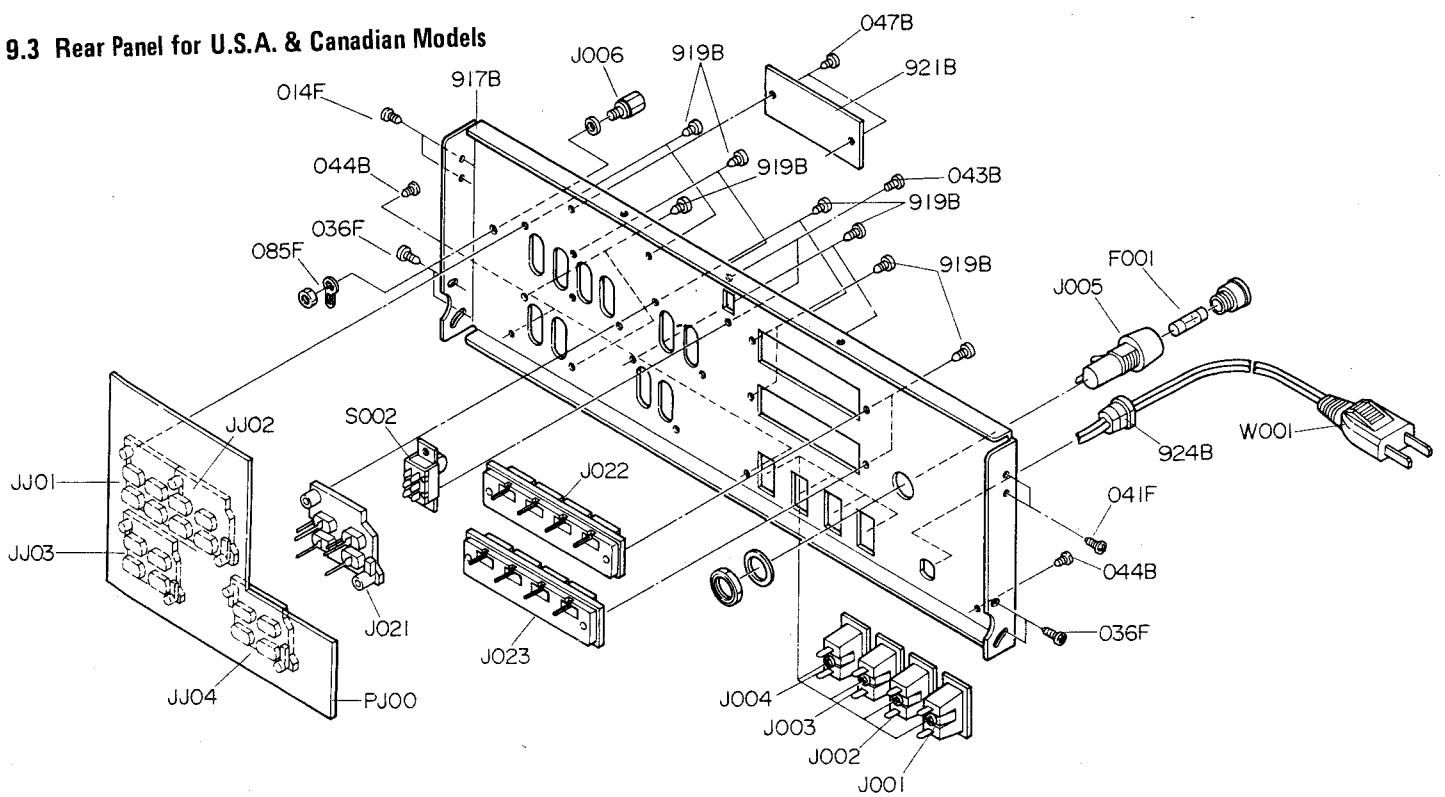
## 9.1 Cabinet



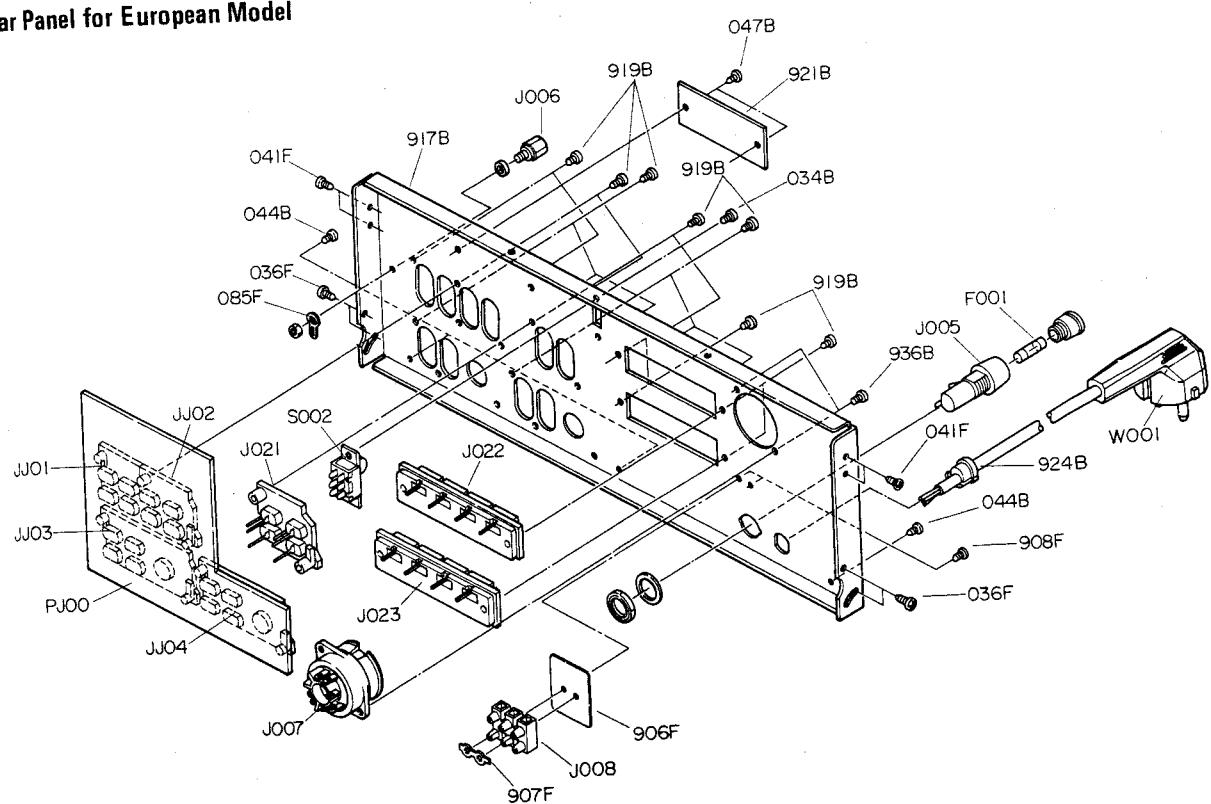
## 9.2 Chassis



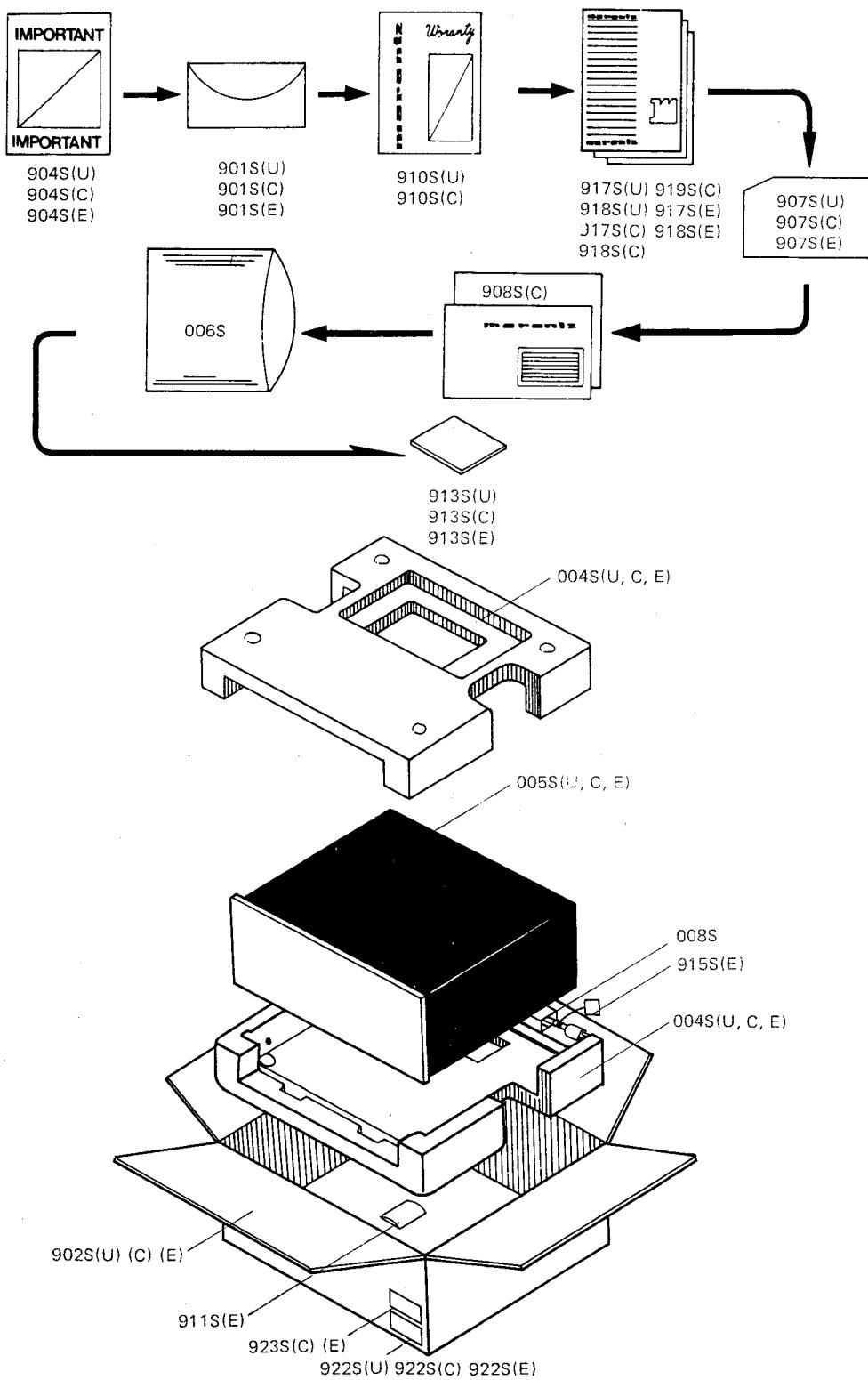
### 9.3 Rear Panel for U.S.A. & Canadian Models



#### 9.4 Rear Panel for European Model



## 10. PACKING MATERIAL EXPLODED VIEW



## 11. PARTS LIST

- (U) for U.S.A.
- (C) for Canada
- (E) for Europe

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	C	E				U	C	E		
A	1	1	1	2963063400	Front Panel Assembly	044B	3	3	3	51280308U0	B. H. Tapped Screw, B3 x 8
001B	2	2	2	2965063050	Escutcheon	045F	2	2	2	2963125010	Joint
002B	10	10	10	51480306A9	F. Washer Screw	046F	1	1	1	2963160020	Bracket
004B	1	1	1	2979259022	Bushing	047B	2	2	2	51760306B0	OS Tapped Screw, O3 x 6
007B	7	7	7	2978259012	Bushing	047F	4	4	4	51280306B0	B. H. Tapped Screw, B3 x 6
008B	3	3	3	2978259020	Bushing	048F	1	1	1	2963109010	Shield
009B	1	1	1	2926259040	Bushing	049F	1	1	1	2963105022	Chassis
010B	3	3	3	2970259010	Bushing	050B	2	2	2	51100306S9	B. H. M. Screw, B3 x 6
012B	1	1	1	2970303010	Mask	050F	4	4	4	51490510A9	L. Washer Screw, L5 x 10
013B	1	1	1	2926303020	Mask	051B	4	4	4	51100410S9	B. H. M. Screw, B4 x 10
901B	1	1	1	2963063014	Escutcheon	051F	4	4	4	51280306B0	B. H. Tapped Screw, B3 x 6
902B	1	1	1	2963063022	Escutcheon	052B	3	3	3	51280308U0	B. H. Tapped Screw, B3 x 8
912B	1	1	1	2979251040	Badge	052F	1	1	1	2963267014	Heatsink
914B	1	1	1	2963053012	Cover	053F	2	2	2	2963160140	Bracket
P407	4	4	4	3444118050	Spacer	054F	1	1	1	2963160130	Bracket
P412	8	8	8	75061751P0	Jumper	055F	1	1	1	2963160040	Bracket
P708	84	84	84	2933118020	Spacer	056F	4	4	4	2963267042	Heat Sink
P711	26	26	26	750615001P0	Jumper	057F	8	8	8	51280306U0	B. H. Tap Screw
P712	6	6	6	75061501P0	Jumper	059F	1	1	1	2963120020	Insulator
P857	8	8	8	3444118050	Spacer	061F	5	5	5	51280306B0	B. H. Tapped Screw, B3 x 6
P001F	1	1	1	2963160010	Bracket	062F	2	2	2	51280306B0	B. H. Tapped Screw, B3 x 6
003B	4	4	4	52017069J0	H. Head Bolt	063F	2	2	2	51280306B0	B. H. Tapped Screw, B3 x 6
003F	1	1	1	2963120012	Insulator	065F	5	5	5	51280306B0	B. H. Tapped Screw, B3 x 6
004F	3	3	3	51340306B0	F. H. Tapped Screw, F3 x 6	069F	2	2	2	51280308B0	B. H. Tapped Screw, B3 x 8
004S	2	2	2	2963809020	Cushion	072F	16	16	16	51470312B9	L. Washer Screw, L3 x 12
005S	1	1	1	9014335330	Polyethylene Bag	075F	4	4	4	2212267020	Heatsink
006F	1	1	1	2970120020	Insulator	076F	4	4	4	51100305S9	B. H. M. Screw, B3 x 5
006S	1	1	1	9013025010	Polyethylene Bag	077F	4	4	4	51280305U0	B. H. Tapped Screw, B3 x 5
007F	2	2	2	51340306B0	F. H. Tapped Screw, F3 x 6	078F	4	4	4	51280308U0	B. H. Tapped Screw, B3 x 8
008S	1	1	1	2864804010	Sleeve	081F	1	1	1	2915267020	Heatsink
009F	17	17	17	51100306A0	B. H. M. Screw, B3 x 6	082F	1	1	1	5128306U0	B. H. Tapped Screw, B3 x 6
011F	1	1	1	2963160090	Bracket	085F	1	1	1	62030049W0	Lug
012F	2	2	2	51100306A0	B. H. M. Screw, B3 x 6	087F	1	1	1	2963109020	Shield
014F	2	2	2	2963112503	Shaft	088F	1	1	1	51280306B0	B. H. Tapped Screw, B3 x 6
015B	1	1	1	53118179A0	Hexagon Nut	089F	1	1	1	62030049W0	Lug
016B	1	1	1	51302608B0	P. H. Tapped Screw, P2.6 x 8	090F	1	1	1	2922120010	Insulator
020B	1	1	1	2963257013	Lid	901S	1			2577813010	Envelope
020F	4	4	4	51280306B0	B. H. Tapped Screw, B3 x 6	901S		1		2818813010	Envelope
021B	4	4	4	51280306U0	B. H. Tapped Screw, B3 x 6	901S		1		2918813012	Envelope
022B	4	4	4	51480406S9	F. Washer Screw, F4 x 6	902S	1	1	1	2963801010	Packing Case
023B	6	6	6	2979259030	Bushing	904S	1			2577851020	Instructions
023F	1	1	1	2978259060	Bushing	904S	1	1		2818851120	Instructions
025F	1	1	1	2970101010	Support	905B	4	4	4	2963154010	Knob
031B	1	1	1	2963105505	Chassis	906B	6	6	6	2963154032	Knob
031F	1	1	1	2963160080	Bracket	906F	1			4113120010	Insulator
032F	2	2	2	51280306B0	B. H. Tapped Screw, B3 x 6	907B	1	1	1	2963154022	Knob
035F	2	2	2	51100306S9	B. H. M. Screw, B3 x 6	907F	1			2970005010	Clamper
036B	3	3	3	51280410U0	B. H. Tapped Screw, B4 x 10	907S	1			2577854012	Guarantee Card
036F	4	4	4	51280306U0	B. H. Tapped Screw, B3 x 6	907S	1	1		9630000180	Guarantee Card
038B	4	4	4	2932057010	Leg	908B	3	3	3	2970154023	Knob
039B	4	4	4	51570410S0	P. Tapped Screw, P4 x 10	908F		2		51100314S9	B. H. M. Screw, B3 x 14
039F	2	2	2	2963126010	Stay	908S	1			9650000050	S. Station Card
040F	4	4	4	51280306B0	B. H. Tapped Screw, B3 x 6	909B	1	1	1	2970154012	Knob
041F	4	4	4	51280306U0	B. H. Tapped Screw, B3 x 6	910S	1			2818854022	Guarantee Card
043B	2	2	2	51100306S9	B. H. M. Screw, B3 x 6	910S	1			2818854040	Guarantee Card
						911S	1			2731821010	Silicagel

- (U) for U.S.A.
- (C) for Canada
- (E) for Europe

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	C	E		
913S	1			2818851040	Instructions
913S	1	1		2818851140	Instructions
915S		1		9560000042	Hang Tag
917B	1	1		2963160214	Bracket
917B		1		2963160223	Bracket
917S	1			2963851010	Instructions
917S	1	1		2963851310	Instructions
918S		1		2886851100	Instructions
918S	1			2963851020	Instructions
918S		1		2963851030	Instructions
919B	14	14	16	51280308U0	B.H. Tapped Screw, B3 x 8
919S		1		2963851050	Instructions
921B	1			2963265010	Indicator
921B		1		2963265020	Indicator
921B		1		2963265030	Indicator
922S	3			9522815010	Serial No. Card
922S		3		9523015110	Serial No. Card
922S		3		9523015120	Serial No. Card
923S	2	2		9510901020	Label
924B	1	1		1455259030	Bushing
924B		1		1455259040	Bushing
925B	1	1	2	62040029W0	Lug
930B	1			2991861010	Label
931B	1		1	2578861010	Label
931B		1		2911861110	Label
932B	1			2911861143	Label
932B	1	1		2932861012	Label
933B	1			9510911010	Label
933B	1			9511101010	Label
935B	1			2911861270	Label
936B	1			2911861012	Label
936B		2		51280306U0	B.H. Tapped Screw, B3 x 6
937B	1			2911861192	Label
938B	1			2911861162	Label
CE01	1	1	1	EE47405040	Electrolytic Cap., 0.47μF ±20% 50V
CE02	1	1	1	EE47405040	Electrolytic Cap., 0.47μF ±20% 50V
CE05	1	1	1	EE47505040	Electrolytic Cap., 4.7μF ±20% 50V
CE06	1	1	1	EE47505040	Electrolytic Cap., 4.7μF ±20% 50V
CE07	1	1	1	DD16201010	Ceramic Cap., 200pF ±10% 50V
CE08	1	1	1	DD16201010	Ceramic Cap., 200pF ±10% 50V
CE09	1	1	1	DF15152010	Film Cap., 1500pF ±5% 50V
CE10	1	1	1	DF15152010	Film Cap., 1500pF ±5% 50V
CE11	1	1	1	DF15562010	Film Cap., 5600pF ±5% 50V
CE12	1	1	1	DF15562010	Film Cap., 5600pF ±5% 50V
CE13	1	1	1	DF15333010	Film Cap., 0.033μF ±5% 50V
CE14	1	1	1	DF15333010	Film Cap., 0.033μF ±5% 50V
CE15	1	1	1	DF15333010	Film Cap., 0.033μF ±5% 50V
CE16	1	1	1	DF15333010	Film Cap., 0.033μF ±5% 50V
CE17	1	1	1	DF15682010	Film Cap., 6800pF ±5% 50V
CE18	1	1	1	DF15682010	Film Cap., 6800pF ±5% 50V
CE19	1	1	1	EA47405090	Electrolytic Cap., 0.47μF 50V
CE20	1	1	1	EA47405090	Electrolytic Cap., 0.47μF 50V
CE21	1	1	1	EA33505090	Electrolytic Cap., 3.3μF 50V
CE22	1	1	1	EA33505090	Electrolytic Cap., 3.3μF 50V
CE25	1	1	1	DF15103010	Film Cap., 0.001μF ±5% 50V
CE26	1	1	1	DF15103010	Film Cap., 0.001μF ±5% 50V

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	C	E		
CE27	1	1	1	DF16104010	Film Cap., 0.1μF ±20% 50V
CE28	1	1	1	DF16104010	Film Cap., 0.1μF ±20% 50V
CE29	1	1	1	DF15273010	Film Cap., 0.027μF ±5% 50V
CE30	1	1	1	DF15273010	Film Cap., 0.027μF ±5% 50V
CE31	1	1	1	DF15823050	Film Cap., 0.082μF ±5% 50V
CE32	1	1	1	DF15823050	Film Cap., 0.082μF ±5% 50V
CE33	1	1	1	EA10705090	Electrolytic Cap., 100μF 50V
CE81	1	1	1	EA22605090	Electrolytic Cap., 22μF 50V
CE82	1	1	1	EA22605090	Electrolytic Cap., 22μF 50V
CE83	1	1	1	EA10701090	Electrolytic Cap., 100μF 10V
CE84	1	1	1	EA10701090	Electrolytic Cap., 100μF 10V
CE85	1	1	1	DD15400010	Ceramic Cap., 40pF ±5% 50V
CE86	1	1	1	DD15400010	Ceramic Cap., 40pF ±5% 50V
CE87	1	1	1	EA22605090	Electrolytic Cap., 22μF 50V
CE88	1	1	1	EA47405090	Electrolytic Cap., 0.47μF 50V
JE01	1	1	1	YP06001040	Plug, Input Basepost
JE02	1	1	1	YJ06001240	Jack, Input
JE03	1	1	1	YP06001050	Plug, Output Basepost
JE04	1	1	1	YJ06001250	Jack, Output
PE00	1	1	1	YK29631310	PE00 TONE CONTROL BOARD
	1	1	1	ZZ29631310	P.W. Board
					P.W. Board Assembly
QE01	1	1	1	HT312222B0	Transistor, 2SC1222 (U or E)
QE02	1	1	1	HT312222B0	Transistor, 2SC1222 (U or E)
QE03	1	1	1	HT107502B0	Transistor, 2SA750 (U or E)
QE04	1	1	1	HT107502B0	Transistor, 2SA750 (U or E)
QE05	1	1	1	HT312222B0	Transistor, 2SC1222 (U or E)
QE06	1	1	1	HT312222B0	Transistor, 2SC1222 (U or E)
QE07	1	1	1	HT107502B0	Transistor, 2SA750 (U or E)
QE08	1	1	1	HT107502B0	Transistor, 2SA750 (U or E)
RE01	1	1	1	RT05222140	Resistor, 2.2kΩ ±5% 1/4W
RE02	1	1	1	RT05222140	Resistor, 2.2kΩ ±5% 1/4W
RE03	1	1	1	RT05154140	Resistor, 150kΩ ±5% 1/4W
RE04	1	1	1	RT05163140	Resistor, 16kΩ ±5% 1/4W
RE05	1	1	1	RT05564140	Resistor, 560kΩ ±5% 1/4W
RE06	1	1	1	RT05564140	Resistor, 560kΩ ±5% 1/4W
RE07	1	1	1	RT05123140	Resistor, 12kΩ ±5% 1/4W
RE08	1	1	1	RT05123140	Resistor, 12kΩ ±5% 1/4W
RE09	1	1	1	RT05102140	Resistor, 1kΩ ±5% 1/4W
RE10	1	1	1	RT05102140	Resistor, 1kΩ ±5% 1/4W
RE11	1	1	1	RT05822140	Resistor, 8.2kΩ ±5% 1/4W
RE12	1	1	1	RT05822140	Resistor, 8.2kΩ ±5% 1/4W
RE15	1	1	1	RT05224140	Resistor, 220kΩ ±5% 1/4W
RE16	1	1	1	RT05224140	Resistor, 220kΩ ±5% 1/4W
RE17	1	1	1	RT05752140	Resistor, 7.5kΩ ±5% 1/4W
RE18	1	1	1	RT05752140	Resistor, 7.5kΩ ±5% 1/4W
RE19	1	1	1	RT05752140	Resistor, 7.5kΩ ±5% 1/4W
RE20	1	1	1	RT05752140	Resistor, 7.5kΩ ±5% 1/4W
RE21	1	1	1	RT05123140	Resistor, 12kΩ ±5% 1/4W
RE22	1	1	1	RT05123140	Resistor, 12kΩ ±5% 1/4W
RE23	1	1	1	RT05103140	Resistor, 10kΩ ±5% 1/4W
RE24	1	1	1	RT05103140	Resistor, 10kΩ ±5% 1/4W
RE25	1	1	1	RT05474140	Resistor, 470kΩ ±5% 1/4W
RE26	1	1	1	RT05474140	Resistor, 470kΩ ±5% 1/4W
RE27	1	1	1	RT05752140	Resistor, 7.5kΩ ±5% 1/4W
RE28	1	1	1	RT05752140	Resistor, 7.5kΩ ±5% 1/4W
RE29	1	1	1	RT05123140	Resistor, 12kΩ ±5% 1/4W

- (U) for U.S.A.
- (C) for Canada
- (E) for Europe

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION			
	U	C	E					
RE30	1	1	1	RT05123140	Resistor,	12kΩ	±5%	1/4W
RE31	1	1	1	RT05684140	Resistor,	680kΩ	±5%	1/4W
RE32	1	1	1	RT05684140	Resistor,	680kΩ	±5%	1/4W
RE33	1	1	1	RT05273140	Resistor,	27kΩ	±5%	1/4W
RE34	1	1	1	RT05273140	Resistor,	27kΩ	±5%	1/4W
RE35	1	1	1	RT05224140	Resistor,	220kΩ	±5%	1/4W
RE36	1	1	1	RT05224140	Resistor,	220kΩ	±5%	1/4W
RE37	1	1	1	RT05682140	Resistor,	6.8kΩ	±5%	1/4W
RE38	1	1	1	RT05682140	Resistor,	6.8kΩ	±5%	1/4W
RE39	1	1	1	RT05103140	Resistor,	10kΩ	±5%	1/4W
RE40	1	1	1	RT05103140	Resistor,	10kΩ	±5%	1/4W
RE41	1	1	1	RT05822140	Resistor,	8.2kΩ	±5%	1/4W
RE42	1	1	1	RT05822140	Resistor,	8.2kΩ	±5%	1/4W
RE43	1	1	1	RT05361140	Resistor,	360Ω	±5%	1/4W
RE44	1	1	1	RT05361140	Resistor,	360Ω	±5%	1/4W
RE45	1	1	1	RT05334140	Resistor,	330kΩ	±5%	1/4W
RE46	1	1	1	RT05334140	Resistor,	330kΩ	±5%	1/4W
RE47	1	1	1	RT05273140	Resistor,	27kΩ	±5%	1/4W
RE48	1	1	1	RT05273140	Resistor,	27kΩ	±5%	1/4W
RE49	1	1	1	RT05432140	Resistor,	4.3kΩ	±5%	1/4W
RE50	1	1	1	RT05432140	Resistor,	4.3kΩ	±5%	1/4W
RE51	1	1	1	RT05102140	Resistor,	1kΩ	±5%	1/4W
RE52	1	1	1	RT05102140	Resistor,	1kΩ	±5%	1/4W
RE53	1	1	1	RT05225140	Resistor,	2.2MΩ	±5%	1/4W
RE54	1	1	1	RT05225140	Resistor,	2.2MΩ	±5%	1/4W
RE55	1	1	1	RT05753140	Resistor,	75kΩ	±5%	1/4W
RE56	1	1	1	RT05753140	Resistor,	75kΩ	±5%	1/4W
RE57	1	1	1	RT05105140	Resistor,	1MΩ	±5%	1/4W
RE58	1	1	1	RT05105140	Resistor,	1MΩ	±5%	1/4W
RE59	1	1	1	RT05151140	Resistor,	150Ω	±5%	1/4W
RE60	1	1	1	RT05151140	Resistor,	150Ω	±5%	1/4W
RE63	1	1	1	RT05151140	Resistor,	150Ω	±5%	1/4W
RE64	1	1	1	RT05151140	Resistor,	150Ω	±5%	1/4W
RE65	1	1	1	RS05030320	Variable Resistor,	50kΩ	Balance	
RE66	1	1	1	RM05030670	Variable Resistor,	50kΩ	Volume	
RE67	1	1	1	RS01040040	Variable Resistor,	100kΩ	Treble	
RE68	1	1	1	RS01040040	Variable Resistor,	100kΩ	Mid	
RE69	1	1	1	RS01040040	Variable Resistor,	100kΩ	Bass	
RE81	1	1	1	RT05102140	Resistor,	1kΩ	±5%	1/4W
RE82	1	1	1	RT05102140	Resistor,	1kΩ	±5%	1/4W
RE83	1	1	1	RT05564140	Resistor,	560kΩ	±5%	1/4W
RE84	1	1	1	RT05564140	Resistor,	560kΩ	±5%	1/4W
SE01	1	1	1	SR04050100	Rotary Switch, Mode			
SE02	1	1	1	SP04010210	Pushswitch,	Loudness		
SE03	1	1	1	SP04010210	Pushswitch,	Tone Defeat		
SE04	1	1	1	SP04010210	Pushswitch,	High Filter, 5kHz		
SE05	1	1	1	SP04010210	Pushswitch,	Low Filter, 60Hz		
CJ01	1	1	1	DK18203010	Ceramic Cap.,	0.02μF	50V	
CJ02	1	1	1	DK18203010	Ceramic Cap.,	0.02μF	50V	
JJ01	1	1	1	YT02040150	Terminal,	Phono 1,2 Input		
JJ02	1	1	1	YT02040150	Terminal,	Tuner Aux Input		
JJ03	1	1	1	BY01050060	Jack,	Tape 1 Input Output		
JJ03	1	1	1	YT02040150	Terminal,	Tape 1 Input Output		
JJ04	1	1	1	BY01050060	Jack,	Tape 2 Input Output		
JJ04	1	1	1	YT02040150	Terminal,	Tape 2 Input Output		
JJ05	1	1	1	YJ06000400	Jack,	10P Connector		
JJ06	1	1	1	YJ06000400	Jack,	10P Connector		

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION			
	U	C	E					
PJ00	1	1	1	YF29630010	P.W. Board			
	1	1	1	ZZ29631010	P.W. Board Assembly			
			1	ZZ29638010	P.W. Board Assembly			
RJ01			1	RT05394140	Resistor,	390kΩ	±5%	1/4W
RJ02			1	RT05394140	Resistor,	390kΩ	±5%	1/4W
RJ03			1	RT05394140	Resistor,	390kΩ	±5%	1/4W
RJ04			1	RT05394140	Resistor,	390kΩ	±5%	1/4W
RJ05			1	RT05104140	Resistor,	100kΩ	±5%	1/4W
RJ06			1	RT05104140	Resistor,	100kΩ	±5%	1/4W
RJ07			1	RT05104140	Resistor,	100kΩ	±5%	1/4W
RJ08			1	RT05104140	Resistor,	100kΩ	±5%	1/4W
JN01		8	8	YJ06001530	Jack,	TR Socket		
JN08								
PN00	1	1	1	YF29630020	P.W. Board			
	1	1	1	ZZ29630020	P.W. Board Assembly			
JN01		1	1	YJ06001530	Jack			
JN08								
JS01	1	1	1	YJ01000860	Jack,	Headphone		
PS00	1	1	1	YK29631320	P.W. Board			
	1	1	1	ZZ29631320	P.W. Board Assembly			
RS01	1	1	1	GJ05331020	Resistor,	330Ω	±5%	2W
RS02	1	1	1	GJ05331020	Resistor,	330Ω	±5%	2W
RS03	1	1	1	GJ05151010	Resistor,	150Ω	±5%	1W
RS04	1	1	1	GJ05151010	Resistor,	150Ω	±5%	1W
SS01	1	1	1	SP08020030	Pushswitch,	Speaker		
CT01	1	1	1	DF16103010	Film Cap.,	0.01μF	±10%	50V
CT02	1	1	1	DF16103010	Film Cap.,	0.01μF	±10%	50V
CT03	1	1	1	DF16103010	Film Cap.,	0.01μF	±10%	50V
CT04	1	1	1	DF16103010	Film Cap.,	0.01μF	±10%	50V
CT09	1	1	1	EE22601640	Electrolytic Cap.,	22μF		16V
CT10	1	1	1	EE22601640	Electrolytic Cap.,	22μF		16V
CT11	1	1	1	EE22601640	Electrolytic Cap.,	22μF		16V
CT12	1	1	1	EE22601640	Electrolytic Cap.,	22μF		16V
QT01	1	1	1	HT309452A0	Transistor,	2SC945	(Q or R)	
QT02	1	1	1	HT309452A0	Transistor,	2SC945	(Q or R)	
QT03	1	1	1	HT107332A0	Transistor,	2SA733	(Q or R)	
QT04	1	1	1	HT107332A0	Transistor,	2SA733	(Q or R)	
QT05	1	1	1	HD20011050	Diode,	1S1555		
QT06	1	1	1	HD20011050	Diode,	1S1555		
QT07	1	1	1	HD20011050	Diode,	1S1555		
QT08	1	1	1	HD20011050	Diode,	1S1555		
QT09	1	1	1	HD20011050	Diode,	1S1555		
QT10	1	1	1	HD20011050	Diode,	1S1555		
QT11	1	1	1	HD20011050	Diode,	1S1555		
QT12	1	1	1	HD20011050	Diode,	1S1555		
QT13	1	1	1	HD20003210	Diode,	1S2471		
QT14	1	1	1	HD20003210	Diode,	1S2471		
QT15	1	1	1	HD20003210	Diode,	1S2471		
QT16	1	1	1	HD20003210	Diode,	1S2471		
RT05	1	1	1	GU05332120	Resistor,	3.3kΩ	±5%	1/4W
RT06	1	1	1	GU05332120	Resistor,	3.3kΩ	±5%	1/4W
RT07	1	1	1	GU05332120	Resistor,	3.3kΩ	±5%	1/4W

- (U) for U.S.A.
- (C) for Canada
- (E) for Europe

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION			REF. DESIG.	Q'TY			PART NO.	DESCRIPTION										
	U	C	E						U	C	E												
RT08	1	1	1	GU05332120	Resistor,	3.3kΩ	±5%	1/4W	W001	1	1	1	YC02400220	A.C. Power Cord									
RT09	1	1	1	GU05432120	Resistor,	4.3kΩ	±5%	1/4W	C401	1	1	1	EE22505040	Electrolytic Cap., 2.2μF ±20%	50V								
RT10	1	1	1	GU05432120	Resistor,	4.3kΩ	±5%	1/4W	C402	1	1	1	EE22505040	Electrolytic Cap., 2.2μF ±20%	50V								
RT11	1	1	1	GD05201140	Resistor,	200Ω	±5%	1/4W	C403	1	1	1	DD12100010	Ceramic Cap., 10pF ±5%	50V								
RT12	1	1	1	GD05201140	Resistor,	200Ω	±5%	1/4W	C404	1	1	1	DD12100010	Ceramic Cap., 10pF ±5%	50V								
RT13	1	1	1	GD05201140	Resistor,	200Ω	±5%	1/4W	C405	1	1	1	EV33600660	Electrolytic Cap., 33μF ±20%	6.3V								
RT14	1	1	1	GD05201140	Resistor,	200Ω	±5%	1/4W	C406	1	1	1	EV33600660	Electrolytic Cap., 33μF ±20%	6.3V								
RT15	1	1	1	GD05201140	Resistor,	200Ω	±5%	1/4W	C409	1	1	1	EA47601090	Electrolytic Cap., 47μF	10V								
RT16	1	1	1	GD05201140	Resistor,	200Ω	±5%	1/4W	C410	1	1	1	EA47601090	Electrolytic Cap., 47μF	10V								
RT17	1	1	1	GD05201140	Resistor,	200Ω	±5%	1/4W	C411	1	1	1	DD16200010	Ceramic Cap., 20pF ±10%	50V								
RT18	1	1	1	GD05201140	Resistor,	200Ω	±5%	1/4W	C412	1	1	1	DD16200010	Ceramic Cap., 20pF ±10%	50V								
RT19	1	1	1	GD05820140	Resistor,	82Ω	±5%	1/4W	C413	1	1	1	EE33505040	Electrolytic Cap., 3.3μF ±20%	50V								
RT20	1	1	1	GD05820140	Resistor,	82Ω	±5%	1/4W	C414	1	1	1	EE33505040	Electrolytic Cap., 3.3μF ±20%	50V								
RT21	1	1	1	GD05820140	Resistor,	82Ω	±5%	1/4W	C415	1	1	1	EE47505040	Electrolytic Cap., 4.7μF ±20%	50V								
RT22	1	1	1	GD05820140	Resistor,	82Ω	±5%	1/4W	C416	1	1	1	EE47505040	Electrolytic Cap., 4.7μF ±20%	50V								
JV01	1	1	1	YJ01000860	Jack,	Microphone	L-ch.	C417	1	1	1	DD16101010	Ceramic Cap., 100pF ±10%	50V									
JV02	1	1	1	YJ01000860	Jack,	Microphone	R-ch.	C418	1	1	1	DD16101010	Ceramic Cap., 100pF ±10%	50V									
PV00 MIC JACK BOARD																							
PV00	1	1	1	YK29631330	P.W. Board			C419	1	1	1	DF65391500	Film Cap., 390pF ±5%	125V									
	1	1	1	ZZ29631330	P.W. Board Assembly			C420	1	1	1	DF65391500	Film Cap., 390pF ±5%	125V									
C001	1	1	1	EQ10601610	Electrolytic Cap., 10μF ±10%	16V		C421	1	1	1	DF14122010	Film Cap., 1200pF ±2%	50V									
C002	1	1	1	EQ10601610	Electrolytic Cap., 10μF ±10%	16V		C422	1	1	1	DF14122010	Film Cap., 1200pF ±2%	50V									
F001	1	1	1	FS10400050	Fuse,	30mm		C423	1	1	1	DF15562010	Film Cap., 5600pF ±5%	50V									
F001	1	1	1	FS10400080	Fuse,	SEMKO (20mm Type) 4AT		C424	1	1	1	DF15562010	Film Cap., 5600pF ±5%	50V									
G001	1	1	1	BF10400040	Cap. Comp.			C425	1	1	1	DD16101010	Ceramic Cap., 100pF ±10%	50V									
G001	1	1	1	BF33300020	Cap. Comp., 0.033μF+120Ω	ECQ-JC		C426	1	1	1	DD16101010	Ceramic Cap., 100pF ±10%	50V									
G001	1	1	1	DO07473540	Oil-Paper Cap., ECN-C4A	SEMKO		C427	1	1	1	EA10710010	Electrolytic Cap., 100μF	100V									
G002	1	1	1	BF33300010	Cap. Comp., 0.033μF+120Ω	AC		J401	1	1	1	YPO6000400	Plug										
J001	1	1	1	YJ04000560	Jack,	AC Outlet		J402	1	1	1	YPO6000400	Plug										
J004	4	4	4	YJ04000560	Jack,	AC Outlet		P400 PHONO AMP. BOARD															
J005	1	1	1	YJ08000220	Jack,	Fuse Holder (20mm Type)		P400	1	1	1	YG29630012	P.W. Board										
J005	1	1	1	YJ08000230	Jack,	Fuse Holder			1	1	1	ZZ29630010	P.W. Board Assembly										
J006	1	1	1	YT01010050	Terminal,Ground			P407	4	4	4	3444118050	Spacer, for R435, R436										
J007	1	1	1	BY03110010	Plug,	Voltage Selector		Q401	1	1	1	HT317751F0	Transistor, 2SC1775A	F									
J008	1	1	1	YL09030010	Terminal,3P			Q402	1	1	1	HT317751F0	Transistor, 2SC1775A	F									
J021	1	1	1	YT02040170	Terminal,Pre In, Main Out			Q403	1	1	1	HT317751F0	Transistor, 2SC1775A	F									
J022	1	1	1	YT03040160	Terminal,Speaker			Q404	1	1	1	HT317751F0	Transistor, 2SC1775A	F									
J023	1	1	1	YT03040160	Terminal,Speaker			Q405	1	1	1	HT317751F0	Transistor, 2SC1775A	F									
J024	1	1	1	YJ05000250	Jack,	LED Socket		Q406	1	1	1	HT317751F0	Transistor, 2SC1775A	F									
J025	1	1	1	YT01010050	Terminal,Ground			R401	1	1	1	RT05623140	Resistor, 56kΩ ±5%	1/4W									
L001	1	1	1	TS60506010	Power Transformer, 120V 60 Hz			R402	1	1	1	RT05623140	Resistor, 56kΩ ±5%	1/4W									
L001	1	1	1	TS60506020	Power Transformer, SEMKO			R403	1	1	1	RT05222140	Resistor, 2.2kΩ ±5%	1/4W									
Q021	1	1	1	HT405882B0	Transistor, 2SD588 (Q or R)			R404	1	1	1	RT05222140	Resistor, 2.2kΩ ±5%	1/4W									
Q022	1	1	1	HT405882B0	Transistor, 2SD588 (Q or R)			R405	1	1	1	RT05334140	Resistor, 330kΩ ±5%	1/4W									
Q023	1	1	1	HT405882B0	Transistor, 2SD588 (Q or R)			R406	1	1	1	RT05334140	Resistor, 330kΩ ±5%	1/4W									
Q024	1	1	1	HT405882B0	Transistor, 2SD588 (Q or R)			R407	1	1	1	RT05684140	Resistor, 680kΩ ±5%	1/4W									
Q025	1	1	1	HT206182B0	Transistor, 2SB618 (Q or R)			R408	1	1	1	RT05684140	Resistor, 680kΩ ±5%	1/4W									
Q026	1	1	1	HT206182B0	Transistor, 2SB618 (Q or R)			R409	1	1	1	RT05433140	Resistor, 43kΩ ±5%	1/4W									
Q027	1	1	1	HT206182B0	Transistor, 2SB618 (Q or R)			R410	1	1	1	RT05433140	Resistor, 43kΩ ±5%	1/4W									
Q028	1	1	1	HT206182B0	Transistor, 2SB618 (Q or R)			R411	1	1	1	RT02621140	Resistor, 620Ω ±2%	1/4W									
Q029	1	1	1	HI10004030	L.E.D.,	SLP-132P		R412	1	1	1	RT02621140	Resistor, 620Ω ±2%	1/4W									
S001	1	1	1	SP02010280	Pushswitch, Power			R413	1	1	1	RT05683140	Resistor, 68kΩ ±5%	1/4W									
S001	1	1	1	SP02010300	Pushswitch, SEMKO			R414	1	1	1	RT05683140	Resistor, 68kΩ ±5%	1/4W									
S002	1	1	1	SS02020380	Slide Switch, DC/AC Coupling			R415	1	1	1	RT05822140	Resistor, 8.2kΩ ±5%	1/4W									
W001	1	1	1	YC01900030	A.C. Power Cord			R416	1	1	1	RT05822140	Resistor, 8.2kΩ ±5%	1/4W									
								R417	1	1	1	RT05101140	Resistor, 100Ω ±5%	1/4W									
								R418	1	1	1	RT05101140	Resistor, 100Ω ±5%	1/4W									
								R419	1	1	1	RT05562140	Resistor, 5.6kΩ ±5%	1/4W									

- (U) for U.S.A.
- (C) for Canada
- (E) for Europe

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION	REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	C	E				U	C	E		
R420	1	1	1	RT05562140	Resistor, 5.6kΩ ±5% 1/4W	J701	1	1	1	YP06001040	Plug, 3P
R421	1	1	1	RT05224140	Resistor, 220kΩ ±5% 1/4W	J702	1	1	1	YP06001040	Plug, 3P
R422	1	1	1	RT05224140	Resistor, 220kΩ ±5% 1/4W	J705	1	1	1	YP06000540	Plug, 6P (SMK)
R423	1	1	1	RT02683140	Resistor, 68kΩ ±2% 1/4W	L701	1	1	1	LL23915120	Choke Coil
R424	1	1	1	RT02683140	Resistor, 68kΩ ±2% 1/4W	L702	1	1	1	LL23915120	Choke Coil
R425	1	1	1	RT02101140	Resistor, 100Ω ±2% 1/4W	<b>P700 MAIN AMP. BOARD</b>					
R426	1	1	1	RT02101140	Resistor, 100Ω ±2% 1/4W	P700	1	1	1	YG29640020	P.W. Board
R427	1	1	1	RT02473140	Resistor, 47kΩ ±2% 1/4W		1	1	1	ZZ29631020	P.W. Board Assembly
R428	1	1	1	RT02473140	Resistor, 47kΩ ±2% 1/4W	Q701	1	1	1	HC10003200	IC, 2SK109 (C or D)
R429	1	1	1	RT02824140	Resistor, 820kΩ ±2% 1/4W	Q702	1	1	1	HC10003200	IC, 2SK109 (C or D)
R430	1	1	1	RT02824140	Resistor, 820kΩ ±2% 1/4W	Q703	1	1	1	HT317752D0	Transistor, 2SC1775A (D or E)
R431	1	1	1	RT05225140	Resistor, 2.2MΩ ±5% 1/4W	Q704	1	1	1	HT317752D0	Transistor, 2SC1775A (D or E)
R432	1	1	1	RT05225140	Resistor, 2.2MΩ ±5% 1/4W	Q705	1	1	1	HT317752D0	Transistor, 2SC1775A (D or E)
R433	1	1	1	RT05271140	Resistor, 270Ω ±5% 1/4W	Q706	1	1	1	HT317752D0	Transistor, 2SC1775A (D or E)
R434	1	1	1	RT05271140	Resistor, 270Ω ±5% 1/4W	Q707	1	1	1	HT317752D0	Transistor, 2SC1775A (D or E)
R435	1	1	1	GF05101140	Resistor, 100Ω ±5% 1/4W	Q708	1	1	1	HT317752D0	Transistor, 2SC1775A (D or E)
R436	1	1	1	GF05332120	Resistor, 3.3kΩ ±5% 1/4W	Q709	1	1	1	HT108722D0	Transistor, 2SA872A (D or E)
S401	1	1	1	SR09070010	Rotary Switch, Selector	Q710	1	1	1	HT108722D0	Transistor, 2SA872A (D or E)
S402	1	1	1	SR02030060	Rotary Switch, Tape Monitor	Q711	1	1	1	HT108722D0	Transistor, 2SA872A (D or E)
C701	1	1	1	DF65101010	Film Cap., 100pF ±5% 50V	Q712	1	1	1	HT108722D0	Transistor, 2SA872A (D or E)
C702	1	1	1	DF65101010	Film Cap., 100pF ±5% 50V	Q713	1	1	1	HT108722D0	Transistor, 2SA872A (D or E)
C703	1	1	1	DF65162010	Film Cap., 1600pF ±5% 50V	Q714	1	1	1	HT108722D0	Transistor, 2SA872A (D or E)
C704	1	1	1	DF65162010	Film Cap., 1600pF ±5% 50V	Q715	1	1	1	HT317752D0	Transistor, 2SC1775A (D or E)
C705	1	1	1	DF16473010	Film Cap., 0.047μF ±10% 50V	Q716	1	1	1	HT317752D0	Transistor, 2SC1775A (D or E)
C706	1	1	1	DF16473010	Film Cap., 0.047μF ±10% 50V	Q717	1	1	1	HT108722E0	Transistor, 2SC872A (E or F)
C707	1	1	1	EA22603590	Electrolytic Cap., 22μF 35V	Q718	1	1	1	HT108722E0	Transistor, 2SC872A (E or F)
C708	1	1	1	EA22603590	Electrolytic Cap., 22μF 35V	Q719	1	1	1	HT108722E0	Transistor, 2SC872A (E or F)
C709	1	1	1	DD15500500	Ceramic Cap., 50pF ±5% 500V	Q720	1	1	1	HT108722E0	Transistor, 2SC872A (E or F)
C710	1	1	1	DD15500500	Ceramic Cap., 50pF ±5% 500V	Q721	1	1	1	HT109142B0	Transistor, 2SA914 (R or S)
C711	1	1	1	DF17104540	Film Cap., 0.1μF 100V	Q722	1	1	1	HT109142B0	Transistor, 2SA914 (R or S)
C712	1	1	1	DF17104540	Film Cap., 0.1μF 100V	Q723	1	1	1	HT319532B0	Transistor, 2SC1953 (R or S)
C713	1	1	1	DF17104540	Film Cap., 0.1μF 100V	Q724	1	1	1	HT319532B0	Transistor, 2SC1953 (R or S)
C714	1	1	1	DF17104540	Film Cap., 0.1μF 100V	Q725	1	1	1	HT319132B0	Transistor, 2SC1913 (R or S)
C715	1	1	1	EA22603590	Electrolytic Cap., 22μF 100V	Q726	1	1	1	HT319132B0	Transistor, 2SC1913 (R or S)
C716	1	1	1	EA22603590	Electrolytic Cap., 22μF 100V	Q727	1	1	1	HT109132B0	Transistor, 2SA913 (R or S)
C717	1	1	1	DF65301510	Film Cap., 300pF ±5%	Q728	1	1	1	HT109132B0	Transistor, 2SA913 (R or S)
C718	1	1	1	DF65301510	Film Cap., 300pF ±5%	Q729	1	1	1	HD20011050	Diode, 1S1555
C719	1	1	1	DF65271510	Film Cap., 270pF ±5%	Q730	1	1	1	HD20011050	Diode, 1S1555
C720	1	1	1	DF65271510	Film Cap., 270pF ±5%	Q731	1	1	1	HD30046090	Zener, WZ-310
C721	1	1	1	DF16473010	Film Cap., 0.047μF ±10% 50V	Q732	1	1	1	HD30046090	Zener, WZ-310
C722	1	1	1	DF16473010	Film Cap., 0.047μF ±10% 50V	Q733	1	1	1	HD30046090	Zener, WZ-310
C723	1	1	1	EA10605090	Electrolytic Cap., 10μF 50V	Q734	1	1	1	HD30046090	Zener, WZ-310
C724	1	1	1	EA10605090	Electrolytic Cap., 10μF 50V	Q735	1	1	1	HD20011050	Diode, 1S1555
C725	1	1	1	DF17104540	Film Cap., 0.1μF 100V	Q736	1	1	1	HD20011050	Diode, 1S1555
C726	1	1	1	DF17104540	Film Cap., 0.1μF 100V	Q737	1	1	1	HD20003210	Diode, 1S2471
C727	1	1	1	DF17104540	Film Cap., 0.1μF 100V	Q738	1	1	1	HD20003210	Diode, 1S2471
C728	1	1	1	DF17104540	Film Cap., 0.1μF 100V	Q739	1	1	1	HD20003210	Diode, 1S2471
C729	1	1	1	DF17104540	Film Cap., 0.1μF 100V	Q740	1	1	1	HD20003210	Diode, 1S2471 (Black)
C730	1	1	1	DF17104540	Film Cap., 0.1μF 100V	Q741	1	1	1	HV00004120	Varistor, MV-1
C731	1	1	1	EA47606390	Electrolytic Cap., 47μF 63V	Q742	1	1	1	HV00004120	Varistor, MV-1
C732	1	1	1	EA47606390	Electrolytic Cap., 47μF 63V	Q743	1	1	1	HV00004120	Varistor, MV-1
C733	1	1	1	EA47606390	Electrolytic Cap., 47μF 63V	Q744	1	1	1	HV00004120	Varistor, MV-1
C734	1	1	1	EA47606390	Electrolytic Cap., 47μF 63V	Q745	1	1	1	HH00007030	Thermistor, SDT-100
C735	1	1	1	DF16104010	Film Cap., 0.1μF 50V	Q746	1	1	1	HH00007030	Thermistor, SDT-100
C736	1	1	1	DF16104010	Film Cap., 0.1μF 50V	Q747	1	1	1	HH00007030	Thermistor, SDT-100
C737	1	1	1	DF16104010	Film Cap., 0.1μF 50V						
C738	1	1	1	DF16104010	Film Cap., 0.1μF 50V						

- (U) for U.S.A.
- (C) for Canada
- (E) for Europe

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION			REF. DESIG.	Q'TY			PART NO.	DESCRIPTION				
	U	C	E		U	C	E		U	C	E		U	C	E		
Q748	1	1	1	HH00007030	Thermistor	SDT-100		R751	1	1	1	GD05680140	Resistor,	68Ω	±5%	1/4W	
Q749	1	1	1	HD20005010	Diode,	W06B		R752	1	1	1	GD05680140	Resistor,	68Ω	±5%	1/4W	
Q750	1	1	1	HD20005010	Diode,	W06B		R753	1	1	1	GD05470140	Resistor,	47Ω	±5%	1/4W	
Q751	1	1	1	HD20005010	Diode,	W06B		R754	1	1	1	GD05470140	Resistor,	47Ω	±5%	1/4W	
Q752	1	1	1	HD20005010	Diode,	W06B		R755	1	1	1	GD05470140	Resistor,	47Ω	±5%	1/4W	
Q753	1	1	1	HD20003210	Diode,	1S2471		R756	1	1	1	GD05470140	Resistor,	47Ω	±5%	1/4W	
Q754	1	1	1	HD20003210	Diode,	1S2471		R757	1	1	1	GD05273140	Resistor,	27kΩ	±5%	1/4W	
R701	1	1	1	GD05332140	Resistor,	3.3kΩ	±5%	1/4W	R758	1	1	1	GD05273140	Resistor,	27kΩ	±5%	1/4W
R702	1	1	1	GD05332140	Resistor,	3.3kΩ	±5%	1/4W	R759	1	1	1	GF05100140	Resistor,	10Ω	±5%	1/4W
R703	1	1	1	GD05333140	Resistor,	33kΩ	±5%	1/4W	R760	1	1	1	GF05100140	Resistor,	10Ω	±5%	1/4W
R704	1	1	1	GD05333140	Resistor,	33kΩ	±5%	1/4W	R761	1	1	1	GF05100140	Resistor,	10Ω	±5%	1/4W
R705	1	1	1	GD05821140	Resistor,	820Ω	±5%	1/4W	R762	1	1	1	GF05100140	Resistor,	10Ω	±5%	1/4W
R706	1	1	1	GD05821140	Resistor,	820Ω	±5%	1/4W	R763	1	1	1	GD05100140	Resistor,	10Ω	±5%	1/4W
R707	1	1	1	GD05821140	Resistor,	820Ω	±5%	1/4W	R764	1	1	1	GD05100140	Resistor,	10Ω	±5%	1/4W
R708	1	1	1	GD05821140	Resistor,	820Ω	±5%	1/4W	R765	1	1	1	GD05100140	Resistor,	10Ω	±5%	1/4W
R709	1	1	1	GD05101140	Resistor,	100Ω	±5%	1/4W	R766	1	1	1	GD05100140	Resistor,	10Ω	±5%	1/4W
R710	1	1	1	GD05101140	Resistor,	100Ω	±5%	1/4W	R767	1	1	1	GJ05562010	Resistor,	5.6kΩ	±5%	1W
R711	1	1	1	GD05513140	Resistor,	51kΩ	±5%	1/4W	R768	1	1	1	GJ05562010	Resistor,	5.6kΩ	±5%	1W
R712	1	1	1	GD05513140	Resistor,	51kΩ	±5%	1/4W	R769	1	1	1	GJ05562010	Resistor,	5.6kΩ	±5%	1W
R713	1	1	1	GD05152140	Resistor,	1.5kΩ	±5%	1/4W	R770	1	1	1	GJ05562010	Resistor,	5.6kΩ	±5%	1W
R714	1	1	1	GD05152140	Resistor,	1.5kΩ	±5%	1/4W	R771	1	1	1	GD05101140	Resistor,	100Ω	±5%	1/4W
R715	1	1	1	GD05823140	Resistor,	82kΩ	±5%	1/4W	R772	1	1	1	GD05101140	Resistor,	100Ω	±5%	1/4W
R716	1	1	1	GD05823140	Resistor,	82kΩ	±5%	1/4W	R773	1	1	1	GD05101140	Resistor,	100Ω	±5%	1/4W
R717	1	1	1	GD05153140	Resistor,	15kΩ	±5%	1/4W	R774	1	1	1	GD05101140	Resistor,	100Ω	±5%	1/4W
R718	1	1	1	GD05153140	Resistor,	15kΩ	±5%	1/4W	R775	1	1	1	GF05330140	Resistor,	33Ω	±5%	1/4W
R719	1	1	1	GD05102140	Resistor,	1kΩ	±5%	1/4W	R776	1	1	1	GF05330140	Resistor,	33Ω	±5%	1/4W
R720	1	1	1	GD05102140	Resistor,	1kΩ	±5%	1/4W	R777	1	1	1	GF05330140	Resistor,	33Ω	±5%	1/4W
R721	1	1	1	GD05473140	Resistor,	47kΩ	±5%	1/4W	R778	1	1	1	GF05330140	Resistor,	33Ω	±5%	1/4W
R722	1	1	1	GD05473140	Resistor,	47kΩ	±5%	1/4W	R779	1	1	1	GF05240120	Resistor,	24Ω	±5%	1/4W
R723	1	1	1	GD05132140	Resistor,	1.3kΩ	±5%	1/4W	R780	1	1	1	GF05240120	Resistor,	24Ω	±5%	1/4W
R724	1	1	1	GD05132140	Resistor,	1.3kΩ	±5%	1/4W	R781	1	1	1	GF05240120	Resistor,	24Ω	±5%	1/4W
R725	1	1	1	GD05223140	Resistor,	22kΩ	±5%	1/4W	R782	1	1	1	GF05240120	Resistor,	24Ω	±5%	1/4W
R726	1	1	1	GD05223140	Resistor,	22kΩ	±5%	1/4W	R783	1	1	1	RT05033140	Resistor,	3.3Ω	±5%	1/4W
R727	1	1	1	GJ05222010	Resistor,	2.2kΩ	±5%	1/4W	R784	1	1	1	RT05033140	Resistor,	3.3Ω	±5%	1/4W
R728	1	1	1	GJ05222010	Resistor,	2.2kΩ	±5%	1/4W	R785	1	1	1	RT05033140	Resistor,	3.3Ω	±5%	1/4W
R729	1	1	1	GJ05152010	Resistor,	1.5kΩ	±5%	1/4W	R786	1	1	1	RT05033140	Resistor,	3.3Ω	±5%	1/4W
R730	1	1	1	GJ05152010	Resistor,	1.5kΩ	±5%	1/4W	R787	1	1	1	GW10332030	Resistor,	0.33Ω	±10%	3W
R731	1	1	1	GD05153140	Resistor,	15kΩ	±5%	1/4W	R788	1	1	1	GW10272030	Resistor,	0.27Ω	±10%	3W
R732	1	1	1	GD05153140	Resistor,	15kΩ	±5%	1/4W	R789	1	1	1	GW10332030	Resistor,	0.33Ω	±10%	3W
R733	1	1	1	GD05153140	Resistor,	15kΩ	±5%	1/4W	R790	1	1	1	GW10332030	Resistor,	0.33Ω	±10%	3W
R734	1	1	1	GD05153140	Resistor,	15kΩ	±5%	1/4W	R791	1	1	1	GW10332030	Resistor,	0.33Ω	±10%	3W
R735	1	1	1	GD05561140	Resistor,	560Ω	±5%	1/4W	R792	1	1	1	GW10332030	Resistor,	0.33Ω	±10%	3W
R736	1	1	1	GD05561140	Resistor,	560Ω	±5%	1/4W	R793	1	1	1	GW10332030	Resistor,	0.33Ω	±10%	3W
R737	1	1	1	GD05561140	Resistor,	560Ω	±5%	1/4W	R794	1	1	1	GW10332030	Resistor,	0.33Ω	±10%	3W
R738	1	1	1	GD05561140	Resistor,	560Ω	±5%	1/4W	R795	1	1	1	GJ05100030	Resistor,	10Ω	±5%	3W
R739	1	1	1	RA02230050	Trimming Resistor,	22kΩCR29R			R796	1	1	1	GJ05100030	Resistor,	10Ω	±5%	3W
R740	1	1	1	RA02230050	Trimming Resistor,	22kΩCR29R			R797	1	1	1	GJ05022020	Resistor,	2.2Ω	±5%	2W
R741	1	1	1	GD05203140	Resistor,	20kΩ	±5%	1/4W	R798	1	1	1	GJ05022020	Resistor,	2.2Ω	±5%	2W
R742	1	1	1	GD05203140	Resistor,	20kΩ	±5%	1/4W	C851	1	1	1	EB10905010	Electrolytic Cap.,	10000μF		50V
R743	1	1	1	GD05222140	Resistor,	2.2kΩ	±5%	1/4W	C852	1	1	1	EB10905010	Electrolytic Cap.,	10000μF		50V
R744	1	1	1	GD05222140	Resistor,	2.2kΩ	±5%	1/4W	C853	1	1	1	EB22716010	Electrolytic Cap.,	270μF		160V
R745	1	1	1	GD05222140	Resistor,	2.2kΩ	±5%	1/4W	C854	1	1	1	EA10725090	Electrolytic Cap.,	100μF		25V
R746	1	1	1	GD05222140	Resistor,	2.2kΩ	±5%	1/4W	C855	1	1	1	DK18103510	Ceramic Cap.,	0.01μF		500V
R747	1	1	1	GD05470140	Resistor,	47Ω	±5%	1/4W	C856	1	1	1	EA10610010	Electrolytic Cap.,	10μF		100V
R748	1	1	1	GD05470140	Resistor,	47Ω	±5%	1/4W	C857	1	1	1	EA47601690	Electrolytic Cap.,	47μF		16V
R749	1	1	1	GD05470140	Resistor,	47Ω	±5%	1/4W	C858	1	1	1	EA22701690	Electrolytic Cap.,	220μF		16V
R750	1	1	1	GD05470140	Resistor,	47Ω	±5%	1/4W	C859	1	1	1	EA22605090	Electrolytic Cap.,	22μF		50V
									C860	1	1	1	EA22605090	Electrolytic Cap.,	22μF		50V
									C861	1	1	1	EA10616010	Electrolytic Cap.,	10μF		160V
									C862	1	1	1	EA10616010	Electrolytic Cap.,	10μF		160V

- (U) for U.S.A.
- (C) for Canada
- (E) for Europe

REF. DESIG.	Q'TY			PART NO.	DESCRIPTION
	U	C	E		
F851		1		FS10025800	Fuse, SEMKO (20mm Type) 250MAT
J868		1		YJ08000200	Jack, Fuse Socket
J869		1		YJ08000200	Jack, Fuse Socket
L851	1	1	1	LY40240040	Relay
<b>P850 POWER SUPPLY BOARD</b>					
P850	1	1	1	YK29630210	P.W. Board
	1	1	1	ZZ29630210	P.W. Board Assembly
Q851	1	1	1	HD20006290	Diode, S5VB20 W/FIN
Q852	1	1	1	HD20011010	Diode, W06C
Q853	1	1	1	HD20011010	Diode, W06C
Q854	1	1	1	HD20011010	Diode, W06C
Q855	1	1	1	HD20011050	Diode, 1S1555
Q856	1	1	1	HT309452A0	Transistor, 2SC945 (Q or R)
Q857	1	1	1	HT309452A0	Transistor, 2SC945 (Q or R)
Q858	1	1	1	HT309452A0	Transistor, 2SC945 (Q or R)
Q859	1	1	1	HT319132B0	Transistor, 2SC1913 (Q or R)
Q860	1	1	1	HT317752E0	Transistor, 2SC1775A (E or F)
Q861	1	1	1	HD30039090	Zener, WZ-240
Q862	1	1	1	HD20011050	Diode, 1S1555
Q863	1	1	1	HD20011010	Diode, W06C
R851	1	1	1	GJ05101010	Resistor, 100Ω ±5% 1W
R852	1	1	1	RT05562140	Resistor, 5.6kΩ ±5% 1/4W
R853	1	1	1	RT05562140	Resistor, 5.6kΩ ±5% 1/4W
R854	1	1	1	RT05822140	Resistor, 8.2kΩ ±5% 1/4W
R855	1	1	1	RT05563140	Resistor, 56kΩ ±5% 1/4W
R856	1	1	1	RT05153140	Resistor, 15kΩ ±5% 1/4W
R857	1	1	1	RT05203140	Resistor, 20kΩ ±5% 1/4W
R858	1	1	1	RT05682140	Resistor, 6.8kΩ ±5% 1/4W
R859	1	1	1	RT05243140	Resistor, 24kΩ ±5% 1/4W
R860	1	1	1	RT05224140	Resistor, 220kΩ ±5% 1/4W
R861	1	1	1	RT05104140	Resistor, 100kΩ ±5% 1/4W
R862	1	1	1	GF05100140	Resistor, 10Ω ±5% 1/4W
R863	1	1	1	GF05562120	Resistor, 5.6kΩ ±5% 1/4W
R864	1	1	1	GF05562120	Resistor, 5.6kΩ ±5% 1/4W
R865	1	1	1	RT05560140	Resistor, 56Ω ±5% 1/4W
R866	1	1	1	GJ05562010	Resistor, 5.6kΩ ±5% 1W

## 12. TECHNICAL SPECIFICATIONS

### FOR U.S.A. MODEL ONLY

#### AMPLIFIER SECTION:

RATED POWER OUTPUT, MINIMUM CONTINUOUS AVERAGE POWER PER CHANNEL, BOTH CHANNELS DRIVEN	61W
POWER BAND	20Hz to 20kHz
TOTAL HARMONIC DISTORTION	0.03%
LOAD IMPEDANCE	8 OHMS
RATED POWER OUTPUT, MINIMUM CONTINUOUS AVERAGE POWER PER CHANNEL, BOTH CHANNELS DRIVEN	77W
POWER BAND	20Hz to 20kHz
TOTAL HARMONIC DISTORTION	0.09%
LOAD IMPEDANCE	4 OHMS

#### I.M. Distortion

(I.H.F. method, 60Hz and 7kHz mixed 4:1 at rated power output)	
at 8 ohm load impedance	0.03%
at 4 ohm load impedance	0.09%
Damping Factor (at 20Hz)	60
Sensitivity (at MAIN IN)	1.5 V
Impedance (at MAIN IN)	30k ohms
Frequency Response for Power Amp Only (at 1 Watt output, 20Hz to 20kHz)	±0.2 dB
S/N Ratio (MAIN IN, "A" WEIGHTED)	110 dB

#### PREAMPLIFIER SECTION:

##### Phono

Input Overload at 1kHz	200 mV
Equivalent Input Noise ("A" WEIGHTED)	0.48μV
Dynamic Range	
(Dynamic Range is the ratio of input overload to equivalent input noise)	109 dB
Input Sensitivity	1.8 mV
Input Impedance	47k ohms
Frequency Response, RIAA 20Hz to 20kHz	±0.3 dB
Signal-to-Noise Ratio ("A" WEIGHTED) (at rated output and 7.75 mV input)	83 dB
High Level (Aux and Tape)	
Input Sensitivity	180 mV

Input Impedance	20k ohms
Frequency Response (includes power amp)	5Hz to 60kHz ±1.0 dB
Signal-to-Noise Ratio ("A" WEIGHTED) (ref. to rated output and 775 mV input)	93 dB
Output Levels	
Tape Out (ref. 7.75 mV at Phono inputs)	775 mV
Pre-Out (ref. 180 mV at Aux inputs)	1.5 V
(ref. 500 mV at Aux inputs, main amp disconnected)	4.2 V
Output Impedance	
Tape Out	330 ohms
Pre-Out	220 ohms

#### GENERAL:

Power Requirements	120V AC, 60Hz
Power Consumption at rated output, both channels operating	250 Watts
Idling Power (Volume Control at zero)	50 Watts
Dimensions:	
Panel Width	416 mm (16-3/8")
Panel Height	146 mm ( 5-3/4")
Depth	312 mm (12-3/8")
Weight:	
Unit alone	12.5 kg (27.5 lbs)
Packed for Shipment	14.5 kg (31.9 lbs)

## FOR EUROPEAN MODEL ONLY

## AUDIO SECTION

POWER OUTPUT AT 1% DISTORTION	120 W
RATED POWER OUTPUT, 1kHz	76 W
TOTAL HARMONIC DISTORTION AT RATED POWER OUTPUT, 1kHz	0.09%
I.M. DISTORTION AT RATED POWER OUTPUT (I.H.F. METHOD, 300 Hz AND 10 kHz MIXED 4:1 AT RATED POWER OUTPUT)	0.09%
POWER BANDWIDTH, ½ RATED POWER OUTPUT	7 Hz ~ 70 kHz
LOAD IMPEDANCE	4 OHMS
POWER OUTPUT AT 1% DISTORTION	75 W
RATED POWER OUTPUT, 1 kHz	61 W
TOTAL HARMONIC DISTORTION AT RATED POWER OUTPUT, 1 kHz	0.03%
I.M. DISTORTION AT RATED POWER OUTPUT (I.H.F. METHOD, 300 Hz AND 10 kHz MIXED 4:1 AT RATED POWER OUTPUT)	0.03%
POWER BANDWIDTH, ½ RATED POWER OUTPUT	7 Hz ~ 70 kHz
LOAD IMPEDANCE	8 OHMS

Damping Factor, SP Output	
40 Hz	60
1 kHz	50
12.5 kHz	45
Frequency Response	
Phono	± 2 dB
Aux	±1.5 dB
Main In	±1.5 dB
Signal-to-Noise Ratio, 1 kHz	
Phono	56 dB
Aux	91 dB
Main In	58 dB
Input Sensitivity, 1 kHz (Rated Input Voltage)	
Phono	1.8 mV
Aux	180 mV
Main In	1.5 V
Input Impedance, 1 kHz	
Phono	47 k ohms
Aux	20 k ohms
Main In	36 k ohms
Phono Equivalent Input Noise	1.5 µV
Phono Dynamic Range	102 dB
Phono Input Capacitance	100 pF
Channal Balance	
Phono	0 ~ -40 dB
Aux	40 Hz ~ 16 kHz
Main In	1.0 dB
Interchannel Crosstalk	
Phono	1 kHz
	250 Hz ~ 10 kHz
Aux	1 kHz
	250 Hz ~ 10 kHz
Tape	1 kHz
	250 Hz ~ 10 kHz

Main In	1 kHz	55 dB
	250 Hz ~ 10 kHz	50 dB
Intersource Crosstalk, Worst Point		
1 kHz	45 dB	
	250 Hz ~ 10 kHz	33 dB
Output Voltage, 1 kHz		
Tape Out	0.18 V	
Pre Out	1.5 V	
Output Impedance, 1 kHz		
Tape Out	330 ohms	
Pre Out	220 ohms	
Power Consumption		
Idling	50 W	
Rated Power, 1 kHz	250 W	
<b>GENERAL:</b>		
Power Requirements	220 V ~, 50 Hz	
(E and N versions are featuring an external voltage selector for use on 110/120/240 V. Other versions can be converted by a qualified technician to operate on 110/120/240 V.)		
Power Consumption at rated output, both channels operating	250 W ±50 W	
Idling Power	50 W ±20 W	
Semiconductor Complement		
Transistors	60	
Diodes	39	
Field Effect Transistors	4	
Dimensions		
Panel Width	416 mm (16-3/8 inches)	
Panel Height	146 mm (5-3/4 inches)	
Depth	316 mm (12-3/8 inches)	
Weight		
Unit Alone	12.5 kg (27.5 lbs)	
Packed for Shipment	14.5 kg (31.9 lbs)	